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ABSTRACT

This study examined the lives of 10 individuals with blindness or severe visual impairment who maintained competitive employment despite their vision loss. The study was designed to provide information regarding the personal characteristics and current practices related to work environment alterations which enhance competitive employment retention. This was accomplished by using a step-wise format, with each individual project building on the information generated in the previous project (this is the third part of a three-part project). Through this process, the individual characteristics of persons likely to be successfully retained in competitive employment and the interventions that facilitated this process were identified. Emphasis is placed on strategies the rehabilitation counselor can use to facilitate effective job modification, job restructuring, training/retraining, and/or cooperation with organized labor, thus promoting retention of competitive employment. Each of the ten case studies presents the perspectives of the client, rehabilitation counselor, employer, and significant other. Results of the study indicate the importance of technology in assisting the majority of the subjects in retaining their employment. Findings also indicate the major factor that, if improved, would facilitate successful job retention more than any other. This is promotion of meaningful communication among all the persons involved in the rehabilitation process. Survey materials are included. (CR)

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Employment Retention After Vision Loss:

Intensive Case Studies



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EMPLOYMENT RETENTION AFTER VISION LOSS:
INTENSIVE CASE STUDIES

Adele Crudden, Ph.D., CRC
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November, 1997

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EMPLOYMENT RETENTION AFTER VISION LOSS: INTENSIVE CASE STUDIES

Introduction

The majority of persons who are blind or severely visually impaired are not employed in the competitive job market (Kirchner, 1985; Louis Harris & Associates, 1994). Those who are, presumably have overcome many obstacles to employment. What are these obstacles and how have they been overcome? This study examined the lives of 10 persons who are blind or severely visually impaired who maintained competitive employment despite their vision loss. This intensive examination of their success in the competitive job market provides insight regarding employment issues facing persons who are blind or visually impaired.

This research represents the third part of a three-part project funded by the National Institute on Disability and Rehabilitation Research. The overall study was designed to provide information regarding the personal characteristics and current practices related to work environment alterations which enhance competitive employment retention of persons who are blind or severely visually impaired. This was accomplished by using a step-wise format, with each individual project building on the information generated in the previous project. Through this process, the individual characteristics of persons likely to achieve successful retention in competitive employment and the interventions that facilitate this process were identified. Emphasis is placed on strategies the rehabilitation counselor can use to facilitate effective job modification, job restructuring, training/retraining, and/or cooperation with organized labor, thus promoting retention of competitive employment.

Phase One

Herndon, G. K., (1995). Contrasting characteristics of blind and visually impaired clients achieving successful and unsuccessful job retention. *Mississippi State: Mississippi State University, Rehabilitation Research and Training Center on Blindness and Low Vision.*

The first phase of the project consisted of an analysis of the National Blindness and Low Vision Employment Outcomes Database (NBLVEO) (Giesen, 1992), a database housed at the Mississippi State University (MSU) Rehabilitation Research and Training Center on Blindness and Low Vision (RRTC). This data, collected in fiscal years 1978 to 1980, and 1985 and 1986, from Florida, Kansas, Mississippi, Ohio, Arizona, New Jersey, and Washington, includes only persons who have received rehabilitation services from their respective state agency. Sampling yielded 506 persons, 225 of whom were competitively employed before their vision loss, yet did not return to

competitive employment (noncompetitive), and 281 persons who did return to competitive employment. Of the 281 who retained competitive employment, 84 persons achieved perfect retention, or employment in the same job in which they were employed prior to vision loss; 197 persons retained competitive employment in a job different from the job held before their decrease in vision (competitive).

In a comparison of the noncompetitive, competitive, and perfect retention groups, researchers found the groups to differ in four key areas: age, education, training, and disability factors. Approximately one third of those in the perfect retention group were 35 years of age or younger. The perfect retention group included more college graduates, but were least likely to have received college training as a rehabilitation service. They also had the least severe visual conditions, the greatest degree of residual vision, were more likely to use visual aids only, and were more likely to receive the highest percent of restoration services.

Approximately two thirds of the individuals who returned to competitive employment, but in a different job, were 35 years of age or younger. High school and college graduates were more likely to retain competitive employment in a different occupation. However, this group was also most likely to receive college training as a rehabilitation service. They were most likely to have sustained their vision loss at less than 1 year of age, tended to have more severe visual and nonvisual disabilities, and to use more aids, both optical and nonoptical, than those who retained their same jobs. Persons who did not return to competitive employment were most likely to have received mobility training as a rehabilitation service, had the most severe disabilities, both visual and nonvisual, and were most likely to use aids. A comprehensive report of this project is available from the MSU-RRTC.

Phase Two

Sikka, A., & Stephens, B. C., (1997). Intervention practices in the retention of competitive employment among individuals who are blind or visually impaired. Mississippi State: Mississippi State University, Rehabilitation Research and Training Center on Blindness and Low Vision.

The second phase of the project was directed toward identifying and describing rehabilitation strategies that were successful in promoting job retention and to discerning which strategies were most effective in attaining that goal. State agency directors or supervisors nominated rehabilitation counselors who were successful in facilitating job retention among agency clients. Eighty-nine counselors participated in structured telephone interviews describing 189 cases of successful job retention.

The most frequently used strategy to facilitate job

retention was a physical modification to the job site, with a majority of the counselors utilizing more than one modification. Almost half of the workers needed a modification to promote safety or access to their work environment. Other job site modifications included provision or modification of computer hardware or software.

The second most frequently used intervention by rehabilitation counselors was training/retraining. Over half the clients received training in the use of assistive equipment. Almost half received training to facilitate their adjustment to blindness.

Counselors used job restructuring strategies, or changes in the job description or methods of performing the job to facilitate retention in over half of the cases. Provision of readers, drivers, or other human assistance, was cited as the primary job restructuring strategy. Other strategies included changes in job duties or assignments, flexible deadlines, exchanges among workers regarding job tasks, and reduced work hours. Contact with organized labor was utilized in fewer than 10% of the cases--typically as a means of providing assistance to the rehabilitation counselor.

Counselors identified additional key areas that should be addressed to facilitate job retention. Communication, particularly with employers, was a major concern for counselors. Counselors recommended networking with potential employers and promoting awareness about the skills and abilities of those with visual disabilities.

Technology issues, particularly concerning issues of safety and accessibility, were important concerns, in addition to low vision devices, and assistive computer hardware and software. Counselors emphasized contact with experts in technology, appropriate training for clients, and timely access to equipment and other services.

An assessment of the employer, the client, and the job duties and site were also advised. These issues will impact the likelihood that retention will occur for persons who have sustained a visual loss.

Phase Three

The third phase of the project, and the phase described in this document, represents an effort to depict, through case study format, the experiences of 10 "exemplars" in the rehabilitation process. Each of these individuals has been successful in retaining employment despite a vision loss. The case study format provides an intensive examination of the experiences of each worker as viewed by the worker, their rehabilitation counselor, their employer, and their significant other.

This multi-faceted approach allows the reader to observe the various conflicting and/or harmonious opinions of the diverse parties in the rehabilitation process. By gaining insight into these views, it is hoped that rehabilitation providers will have

a clearer and more complete understanding of the factors influencing the client and the employer and thus be more effective in their own intervention strategies.

In-depth interviews were conducted with each worker, rehabilitation counselor, employer, and significant other. These interviews were minimally structured, but did focus on the thoughts and opinions of each respondent regarding the client's efforts to retain competitive employment. The impact of job modification, job restructuring, training/retraining, and contact with organized labor was examined with each respondent. In order to supplement case study information, each of the persons interviewed (i.e., the person with a visual disability, or the worker, the employer, the rehabilitation counselor, and the significant other) were asked to complete an 11-item Likert-scale survey ranking each item regarding its importance to the worker's ability to retain employment (See Appendix).

Methodology

Research Strategy

Qualitative and quantitative methodology were utilized in the research process. The qualitative approach was utilized to encourage client participation in the interview format and to facilitate an in-depth and holistic view of the rehabilitation process for persons who retain their employment after vision loss.

A survey format was used to obtain an objective means of comparing the perceived importance of various issues in the rehabilitation process for each of the parties involved. This allowed the researcher to establish comparisons between the 10 clients served, and to compare the views of the various parties involved with each client to each other. Because the sample size was small and select, data generated from this analysis are not easily generalizable to other populations. However, this information does provide the reader with insight regarding the similarities and differences of opinion and thought of the various parties involved in the rehabilitation process.

Sample

Following receipt of project approval from the MSU Institutional Review Board for the Protection of Human Subjects, rehabilitation counselors participating in Phase 2 of this project were asked to provide, with the client's permission, the names of up to three clients who successfully retained employment after experiencing a vision loss. This generated a list of 41 potential subjects from which to sample. A random sample was utilized to select 10 subjects for participation in the project.

A written request, a consent form agreeing to participate, and a brief survey were sent to each of the selected subjects. When attempts to contact potential subjects by mail generated no response, the researcher attempted telephone contact. Of the

initial 10 persons selected, efforts to reach one person by mail or by telephone were unsuccessful. Two additional persons declined participation in the study, one due to lack of time; the other gave no explanation. Three additional names were randomly selected from the sample pool.

After obtaining the client's consent to participate, the client was asked to verbally contact their rehabilitation counselor, employer, and significant other to request participation in this research. After the client obtained their verbal interest in participating in the study, the names and addresses of the significant other, employer, and rehabilitation counselor were obtained from the client and written requests, consent forms, and surveys were disseminated to each. Each of these other parties was contacted for a telephone interview at a time convenient to them. Thus, each case study represents a composite picture of the client's efforts to retain employment and the rehabilitation process from multiple points of view.

Procedure

Each client participated in a telephone interview that was taped for note-taking purposes. These interviews were loosely structured and focused on the client's efforts to retain employment. Specific questions did address the issues of job site modification, job restructuring, training/retraining, and cooperation of organized labor. Typically, the researcher began the interview with a comment like, "You are probably aware that a large number of people who are employed and lose all or a great deal of their vision leave the competitive job market. Please tell me about some of the issues you dealt with in your efforts to retain your employment."

Each client was interviewed by telephone on two to three separate occasions. Telephone sessions varied in length from approximately 45 minutes to just over 1 hour. After at least one telephone session with the client, interviews were conducted with each of the other parties. These interviews were typically shorter ranging from approximately 10 minutes to 1 hour. The same basic format was used to interview the rehabilitation counselor, employer, and significant other.

Analysis

Tape recorded interviews were transcribed and analyzed by the researcher. A case study summarizing the comments of the client, rehabilitation counselor, employer, and significant other was developed for each client. In the summation, every attempt was made to retain the spirit and intent of the person making the particular comment. The exact verbiage of the respondent was utilized in many cases, and is indicated by quotation marks and italic type. Even when remarks were paraphrased or summarized, the words used to convey the thoughts are primarily those of the respondent.

After the case study was developed, it was submitted to the

client for review. Through this process, each client had the opportunity to insure the accuracy of the reported information and review the level of personal disclosure. In some cases, clients made minor changes in factual information that was misunderstood or reported incorrectly. Some clients requested that particular details be omitted or modified to protect or obscure their identities. Each client indicated satisfaction with the modified version of the case study.

Each case study is divided into four major sections based on the person providing the information (i.e., client, rehabilitation counselor, employer, significant other). Within each section, topical divisions are made to make the study more logical to the reader. The theme of each topical heading is based on the results of the previous two phases of this research project, and the remarks of the respondent. Although there is considerable overlap of topics, the topics are not identical across cases due to the varying remarks of the respondents.

At the conclusion of each case study, readers will find a brief analysis of the surveys completed by each of the parties involved with the job retention of that particular person. For a cumulative report of survey information, readers are directed to the results section of this report, which also contains an analysis of themes pertinent to employment retention of each of the 10 clients, a summary of demographic data, and an analysis of the overall survey information.

Mr. Jackson

Worker Perspective

Mr. Jackson worked successfully in several private sector businesses before gradually losing his vision due to retinitis pigmentosa. As his vision deteriorated, he returned to school and earned a graduate degree in vocational rehabilitation counseling. Currently, Mr. Jackson is employed as a rehabilitation supervisor for a western state agency providing general vocational rehabilitation services.

Job Site Modification

During the past few years, Mr. Jackson has experienced additional vision loss, has had three eye surgeries, and now relies more heavily on voice synthesis to access his computer; he uses the screen enlarger and close circuit television (CCTV) less frequently. He works in an office that gets a great deal of natural light and has modular furniture to maximize the use of office space.

Mr. Jackson's equipment has been updated at least three times. He is in the process of learning to use a Windows-based system. It took approximately 9 months to obtain the equipment. The employer offered other supports (i.e., readers, for approximately 4 months). Efforts are currently underway to obtain a scanner to further increase access to printed materials.

Equipment is obtained through a joint agreement between the employing agency and the state agency providing rehabilitation services to the blind. The agency providing rehabilitation services to persons who are blind provides evaluation, training, and technical assistance and the employing agency purchases the actual equipment.

Job Site Restructuring

After his employment, Mr. Jackson elected to obtain a dog guide. He was required to spend 20 work days in the dog guide training program. The employer allots 10 days of paid vacation to each employee per year. The employer allowed Mr. Jackson to take the additional 10 days off the job with pay so that he could complete the training program.

Mr. Jackson flies to meetings across the state, though most employees are required to drive. He is not required to ride with the drivers because he has a dog guide. When Mr. Jackson participates in meetings in his own city, the agency reimburses him the actual cost of the transportation, usually cab fare, rather than the mileage rate allotted to other employees.

Training/Retraining

Mr. Jackson attended an independent living skills training program to learn adaptive skills, including training in Braille,

personal management, and orientation and mobility. After a period of unemployment, he returned to college to pursue a graduate degree in rehabilitation counseling funded through the Rehabilitation Services Administration.

More recently, Mr. Jackson has obtained training in the use of adaptive equipment, such as a voice synthesizer. He participated in 5 days of evaluation at the state residential evaluation and training facility after his eye surgery and additional loss of vision. He became certified in Braille use. In the future, he will receive training in the use of a scanner.

Mr. Jackson participates in staff development training activities on a regular basis with other agency staff.

Transportation

Mr. Jackson relies on a dog guide he obtained through Lion's World Services to assist him with daily transportation. He typically uses public transportation to get to and from work.

Motivation

Mr. Jackson did not consider leaving the workforce when his vision deteriorated. When forced to leave his employment as an insurance adjuster because he was no longer able to drive, he pursued additional education and a career change. His goal was to continue working, but in the rehabilitation field. Mr. Jackson already possessed an undergraduate degree in allied health.

Mr. Jackson regards himself as a confident person with a proven track record of successful employment. He attributes his success on the job to his respect for others, which results in his ability to get along well with many different types of people. Mr. Jackson states that he has "that old work ethic," or the desire to "not only be busy, but to contribute, to work, or to make a difference." When he took his first job after completing graduate school and returning to the workforce as a person with a visual impairment, he earned only slightly more than he was collecting through other benefit sources. He returned to work, however, because he wanted to be productive, make a difference, earn more money, and eventually, have a more comfortable lifestyle.

Although Mr. Jackson attributes his desire to work to the work ethics ingrained in him, he points out that many of the clients he works with do not have the same opportunities and skills, and thus have more limited options. He respects persons who are busy and engaged in worthwhile activity, though at times that activity does not include paid employment.

Mr. Jackson also has a more personal source of motivation. His mother began losing her sight at about age 40 and it gradually decreased until she became totally blind. When his mother was forced to leave her job as a registered nurse due to her vision loss, she obtained additional training and became a

certified special education teacher. From there, she obtained a superintendent certificate and by the time she retired, she was the administrator of a school district. She served as an excellent role model for Mr. Jackson.

In the future, Mr. Jackson hopes to retire from his current position and start another business. He has considered participating in the Business Enterprise Program, which would utilize his previous experience in the restaurant business. He will retire at about age 60 and hopes to work in another business at least 5 or 6 years before truly retiring.

Mr. Jackson believes in staying busy as a method of avoiding depression. He *"always had a strong desire to make a difference; to do something that was to benefit" himself and others.*

Rehabilitation Services

When applying for admission to graduate school, university personnel referred Mr. Jackson to state rehabilitation services. He followed-up on this referral when he needed assistance obtaining accommodations for an entrance examination. State rehabilitation services did not pay Mr. Jackson's tuition, but did provide valuable counseling and guidance services, adaptive equipment, reader services, and some financial assistance with transportation expenses. Upon graduation, the rehabilitation counselor made Mr. Jackson aware of employment opportunities in the state and federal systems.

Mr. Jackson currently has an open case with the state agency providing rehabilitation services to the blind and has received evaluation, training, and technical assistance associated with equipment use. The counselor continues to provide counseling, guidance, and support.

Each time Mr. Jackson sustains additional vision loss or his equipment is in need of upgrades, the agency for the blind opens his rehabilitation file again. The rehabilitation counselor meets with the employer to discuss issues, such as Mr. Jackson's equipment needs and job duties. After the appropriate accommodations are determined and provided, the file is closed.

Most recently, Mr. Jackson participated in an evaluation for computer equipment at the evaluation and training center for persons who are blind. The evaluation recommended a DOS-based system, although the employer was moving to a Windows-based system. The employer elected to disregard the evaluation results and purchased a Windows-based system with adaptive equipment for Mr. Jackson.

Employer Issues

Mr. Jackson is employed as a supervisor with the state agency providing rehabilitation services to persons with disabilities. He enjoys his job because it allows him to make a *"significant difference in people's lives,"* and because the benefits and compensation are adequate. He plans to continue

working for a long time, though he is eligible for retirement.

Mr. Jackson did not state his visual impairment on his application or mention it in his cover letter to the agency. However, he informed the interviewer that he was legally blind when the interview was scheduled. The interviewer offered to bring documents related to potential employment with the agency in large print.

When offered the job, Mr. Jackson accepted it without discussing plans for job modification or restructuring with the employer. Although Mr. Jackson initially encountered some resistance from some coworkers, most were reassured when they observed his level of independence.

After the agency providing rehabilitation services for the blind evaluated Mr. Jackson and made recommendations for equipment to assist him in performing his job, the employer purchased the equipment. The employer is attempting to procure a scanner for Mr. Jackson. The ADA coordinator has been helpful in locating funding through the employer for equipment needs.

Throughout his employment with the agency, Mr. Jackson has been promoted several times. He feels he has had an equal chance of promotion as sighted employees. He has received awards for his outstanding performance.

Although Mr. Jackson has felt some pressure to prove himself and succeed on the job, he believes this pressure is felt by all employees. He feels the job requires excellent organizational and time management skills and the ability to achieve successful job placements with workers with disabilities. Those able to perform these tasks, succeed at the job while others find it overwhelming and leave the agency.

The employer utilizes a safety committee to minimize on-the-job accidents. This committee has been helpful to Mr. Jackson in that it sensitizes coworkers to safety issues. Mr. Jackson also feels his dog guide helps him avoid potential hazards.

Coworker Issues

Clerical staff initially appeared more hesitant than other counselors about accepting Mr. Jackson. He attributes their attitude to concern that the clerical staff would be asked to provide additional assistance. Most coworkers now accept Mr. Jackson and respect his ability to perform his job. Some coworkers unfamiliar with blindness and its causes have been educated through Mr. Jackson. Other coworkers have expressed concern about Mr. Jackson's dog guide, namely with respect to allergies or not wanting the dog hair on their clothes or in their cars.

Throughout his job tenure and the deterioration of his vision, Mr. Jackson has remained secure in his employment. The employer expected Mr. Jackson to keep management aware of his needs. Mr. Jackson states that the most important thing the employer did was reassure him that the agency would do whatever was needed to help him perform his job duties.

Family Issues

Mr. Jackson sometimes felt his family was not supportive of his efforts to obtain additional skills so he could continue to work. It was difficult for his family to watch him struggle to complete graduate school. He has siblings who cannot understand why he left their childhood home to pursue a career when he could have collected other benefits and remained near his extended family. These family attitudes were sometimes quite difficult for Mr. Jackson to handle. Even today, despite Mr. Jackson's success, some of the same relatives find it difficult to understand his decision.

At times, Mr. Jackson's spouse would ask him, "Do you really want to beat yourself up?" When she saw that Mr. Jackson was determined to pursue his career in rehabilitation, she became supportive.

Recommendations

Mr. Jackson stated that if a person loses their vision after establishing a career, it is important that they enroll in classes or do whatever it takes to learn the skills to stay in the job market. Even if they do not succeed, they should at least try; retirement is always an option. Mr. Jackson believes dog guides are very helpful because they promote mobility and confidence.

If giving advice to an employer, Mr. Jackson would recommend making every effort to retain a person who sustains a visual loss because the employee is familiar with the company and so many job modifications are available. Vocational rehabilitation services can be a valuable asset to employers trying to retain workers who sustain disabilities.

In regard to rehabilitation counselors, Mr. Jackson recommended looking "at the human element as everybody has some potential". He believes that if a person is motivated and is given a chance to succeed, rehabilitation will be successful. Believing in people is a key factor in rehabilitation success.

Persons who have family members with disabilities should try to be understanding and supportive. It is important for the family to be open-minded and listen to ideas. Family members shouldn't let the security of regular government money keep them from encouraging the person with the disability to try to work. Mr. Jackson believes that "the determining factor is an individual's own motivation and work ethic."

Rehabilitation Counselor Perspective

Mr. Jackson's rehabilitation file has been opened and closed several times by different counselors. Ms. Sangria recently took over the file because Mr. Jackson is in need of a voice synthesizer to access a Windows environment, as well as a scanner

to access printed materials. An evaluation was completed prior to recommending equipment purchases.

Ms. Sangria utilizes an employment assistance specialist from another city to visit the work site, discuss job duties and requirements, and make recommendations regarding equipment needs. Ms. Sangria was unclear whether the employment assistance specialist worked independently with Mr. Jackson or if the employer was involved in the process. However, the director of the general agency providing rehabilitation services, Mr. Jackson's employer, has close and ongoing contact with the director of the agency providing rehabilitation services to persons who are blind. It has taken approximately 1 year to address the technological aspects of the case.

Previously, Mr. Jackson received a low vision evaluation, glasses, and other low vision aids. Repairs to the aids have also been provided.

Job Site Modification/Job Restructuring

Mr. Jackson sustained a decrease in visual functioning resulting in a request for a voice synthesizer for his computer and a scanner to access printed documents. While waiting for the equipment to be procured, the employer provides Mr. Jackson with additional assistance.

Training/Retraining

The employer is currently providing training for Windows-based systems to all employees. Mr. Jackson will participate in this general training session, then will request and receive individual training from the agency for the blind. Mr. Jackson received training in Braille from the agency for the blind.

Employer Issues

After Mr. Jackson participated in an evaluation by the agency for persons who are blind, the agency made recommendations regarding what equipment the employer should purchase. The employer was not in agreement with the agency recommendations for a DOS-based system rather than a Windows-based environment, which is what the employer uses. The employer requested another evaluation from the agency but the agency declined. The employer elected to proceed with obtaining Windows-based systems not only for Mr. Jackson, but for all employees, including all those with visual impairments.

The employer purchases all needed equipment as a reasonable accommodation for Mr. Jackson. He has been with the employer for a long time and is a valued employee.

Personal Issues

Mr. Jackson always keeps Ms. Sangria informed about his needs and his status. They have ongoing contact. Ms. Sangria describes Mr. Jackson as very helpful, positive, and optimistic. He is also attentive, courteous, flexible, and very patient. Mr.

Jackson has never considered not working. He appears to like his job, and what he does, which has motivated him to stay employed.

Recommendations

The rehabilitation counselor recommended that other rehabilitation counselors realize that keeping people working is "part of a work ethic" and "really not something that we can do". Ms. Sangria believes that, "if people want to work, they will work" and "sometimes no matter the effort, some people don't want to work." Those who do want to work should be encouraged and helped. The personal characteristics, information, knowledge, and community opportunities available influence the situation, but "if they don't have the drive to work, it is very difficult to keep them working." Ms. Sangria realizes that "some people with disabilities are not aware that they can work or that there is particular equipment to help them out."

Employer Perspective

Mr. Jackson is the first employee that the supervisor, Mr. Fine, has worked with who has a visual impairment. Mr. Jackson was transferring from another area of the state, so he already had experience with the agency and the job. Mr. Jackson was eligible for the job because the caseload available was within the city, making it accessible by taxi. Other counselors have caseloads up to 40 or 50 miles from the city. This was not an accommodation for Mr. Jackson; it just happened to be the

"Some people with disabilities are not aware that they can work or that there is particular equipment to help them out."

territory available, although Mr. Fine would have been agreeable to reconfiguring the caseloads to accommodate Mr. Jackson had it been necessary.

The employing agency encourages hiring anyone with a disability, though the most qualified applicant is always hired. Records are kept throughout the state regarding how many persons who are minorities, including those with disabilities, are hired.

Job Site Modification/Job Restructuring

The employing agency is increasingly moving toward a Windows-based environment where case files are kept in a computer

base. This has resulted in some difficulty getting adaptive equipment, both hardware and software, to work correctly with the new equipment. Some problems for Mr. Jackson and other employees who are visually impaired have occurred as a result. One consequence of this problem is that all staff with visual impairments were called to a state-wide meeting to try out computer adaptations. Meetings of this type result in time lost on the job and additional expenses.

Another employment issue is transportation. Mr. Jackson uses taxis to travel, as needed, throughout the city. When out of town travel is needed, he typically flies. All travel expenses are paid by the employer. Employees without visual impairments are usually required to travel by car and carpool with each other to minimize costs. Because Mr. Jackson utilizes a dog guide, he is not required to travel by car with other employees.

Mr. Jackson's assistant also functions as a reader. When Mr. Jackson had additional vision loss, another person was hired 10 hours per week to provide reader services to Mr. Jackson.

Training/Retraining

Computer access training was provided to Mr. Jackson at the state rehabilitation facility for the blind. The agency for the blind has also provided on-the-job training in computer use. There has been minimal, though sufficient, contact with the state agency for the blind.

Transportation

Mr. Jackson uses the regional public transportation system and a dog guide to travel to and from work.

Coworker Issues

The employer promotes a strong and conscious effort among employees to be safe in their daily work. This includes attention to potential physical risks and making employees aware on an ongoing basis of how important it is to be safe in the work environment. Working with someone who is blind has been a learning experience for everyone at the agency.

Personal Issues

Mr. Jackson is regarded as one of the hardest working people in the agency.

Recommendations

The employer advised other employers not to be afraid of persons with disabilities, but concentrate on the assets and skills the person has. "It is not only the law, it is the right thing to do." Rehabilitation counselors must help employers get rid of the prejudice regarding persons with disabilities. Employers need to consider allowing employees with disabilities to trade job duties with other employees so that together, they

can get the job done.

Workers with disabilities should concentrate on their skills. They need to educate employers about the fact that they can still work, they just work a little differently.

To get employers to hire a person with a disability, the employer must have a certain amount of willingness. Some are reluctant due to ignorance. It helps if the employer has had a family member, neighbor, or friend with some disability. That exposure helps them realize that a person with a disability is a human being. Employers need an "attitudinal education" because if they are not willing to change their attitudes, nothing is going to happen.

Persons with disabilities need to have "a full acceptance of that limitation in their life and not be over-bearing toward other people with that." It is important for persons with disabilities to "have a sense of humor and be a team member and not a whiner." Your personality can be a major disability, even much more than a physical disability.

Significant Other Perspective

Coworker Issues

Mr. Jackson tolerates negative attitudes of others in a positive way, merely stating that each person has a right to their own opinion. Eventually, he wins over most people with his tolerance, understanding, and positive attitude. Most coworkers have accepted him and they all count on each other when needed.

The supervisor is a very caring individual who treats Mr. Jackson the same way as he treats other employees. The employer makes adaptations for his disability, but otherwise, there is no difference; he is expected to perform at the same level as other workers.

Transportation

The paratransit system in the city is not reliable. Mr. Jackson utilizes the regular bus system for travel throughout the city. When necessary, Ms. Jackson takes him to appointments. Ms. Jackson has a job with the flexibility to provide her spouse with transportation as needed.

Rehabilitation Services

The rehabilitation counselor working with Mr. Jackson when he was attending graduate school would occasionally drop by the Jackson's home and tell Ms. Jackson how her spouse was doing at school. The counselor was a good role model for Mr. Jackson and was supportive of the family. The counselor arranged for Mr. Jackson to receive orientation and mobility training, which was very helpful. There has been no contact with the current

rehabilitation counselor.

Family Issues

Mr. and Ms. Jackson have been married 30 years. Ms. Jackson remembers when her spouse lost his vision and many persons advised him to stay at home, take care of the children, and do household tasks. That was unacceptable to Mr. Jackson, although Ms. Jackson would have been agreeable to this alternative.

Ms. Jackson maintains that her role in Mr. Jackson's efforts to retain his employment were very ordinary. She provided support for anything he chose to do. Although the time Mr. Jackson was in graduate school was difficult for the family, Ms. Jackson continued to provide support. She never treated Mr. Jackson as if she pitied him. She attributes her ability to provide support and be strong through the difficult periods to her faith. Ms. Jackson does, however, wish that she had been even more understanding of her spouse than she was.

Ms. Jackson expresses her pride in her spouse's ability to handle his vision loss. He deals with his frustration and fears in a positive way. She feels that their family has been very fortunate and very blessed.

Personal Issues

When Mr. Jackson was losing his vision, he worked as a manager of a restaurant. After his vision decreased to the point where he could no longer see the account records, he went to work in a furniture store. The manager was very understanding of Mr. Jackson's visual disability. The manager even refrained from moving furniture around in the store so that Mr. Jackson would have an easier time moving around it.

Both the boss at the restaurant and at the furniture store knew Mr. Jackson wanted to succeed. They were both excellent role models. Ms. Jackson feels that God blessed Mr. Jackson with these bosses.

Each time Mr. Jackson sustained additional loss of vision he experienced another trauma worse than the one before. He has found it particularly difficult to adjust to being unable to read printed materials.

Ms. Jackson relates that her spouse imposes a great deal of stress on himself "to achieve as any normal person would be asked to." To do this, he must put in longer hours than persons who are sighted, and he has gotten fed up with that. Mr. Jackson has, however, been in the same job for 10 years, is very comfortable with it, and feels he is good at it.

Travel continues to be difficult for Mr. Jackson. Though he has a dog guide, Ms. Jackson feels he is apprehensive when traveling alone. He is never negative about his disability.

Mr. Jackson's determination and high need to achieve have kept him motivated to work. Ms. Jackson feels, "He just isn't the type to sit at home and draw disability benefits." She attributes

this determination and motivation to his upbringing.

Mr. Jackson's parents were divorced. Because his parents were very busy, he saw little of them while growing up. He learned to be responsible for himself. He also has a strong faith in God.

Recommendations

If you are the significant other of a person who sustains a visual loss, it is important to love and support them, but not to mix love and support with pity. Also, do not let the person feel self-pity. Each person must learn that the vision loss is "something that they just have to do, they have to get over, so they should learn how to do it positively, to be determined, that this is not going to keep them back." Sometimes the person will "lash out" but "remember that they are not lashing out at you. But you are a safe haven; they can vent their frustrations on you and you are not going to retaliate. Learn not to retaliate. Sort of detach yourself from the situation. Always be helpful, but not too helpful. They can do it for themselves."

Ms. Jackson also recommends that coworkers of a person who sustains a visual loss be helpful and understanding. Help the person but treat them normally. Persons with visual impairments should be treated "the same way you would treat anyone else."

Survey Results

The results of the survey indicated that there is both agreement and disagreement among the 4 respondents regarding which issues influenced job retention. All parties agreed that the rehabilitation process, the role of the employer, and the personal characteristics of the worker were either "very important" or "critically important". Coworker attitudes and retraining were rated as being "very important" or "somewhat important" by all 4 respondents. And cooperation with organized labor was rated as "not important" or "somewhat important" by all respondents.

The rehabilitation counselor stated that a change in the physical surroundings at the job site were "not important"; however, the other 3 respondents indicated this change was "very important". Transportation was rated as "critically important" by all but the rehabilitation counselor, who rated it as "somewhat important". The importance of the rehabilitation counselor on job retention was rated as "somewhat important" by Mr. Jackson, "very important" by his significant other and his rehabilitation counselor, and "critically important" by his employer.

A change in the job duties or job description was rated as "not important" by the rehabilitation counselor, "somewhat important" by Mr. Jackson and the employer, and "very important"

by the significant other. The role of the significant other was rated as "not important" by the employer, "somewhat important" by the significant other, and "very important" by the Mr. Jackson and the rehabilitation counselor. In regard to transportation issues, the employer and the rehabilitation counselor stated they were "somewhat important", Mr. Jackson said they were "very important", and the significant other stated they were "critically important".

Table 1. Survey Results: Jackson

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	3	4	5	4
Rehabilitation process	4	4	5	5
Significant other	4	3	2	4
Employer	4	5	4	5
Change in job duties or job description	3	4	3	2
Change in physical surroundings at job	4	4	4	2
Cooperation with organized labor	2	3	2	2
Retraining	4	4	3	4
Transportation	5	5	5	3
Financial issues	4	5	3	3
Coworker attitudes	4	4	4	3
Personal characteristics of worker	4	4	4	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Max Gordon

Worker Perspective

Max Gordon is employed with a major communications corporation in an industrialized region of the northeastern United States. He and his spouse live approximately 7 miles from his job site. When he sustained a significant visual loss, due to retinitis pigmentosa and macula degeneration, he was employed as a Senior Technical Associate designing the physical layout of integrated circuits on a graphics-based computer system. Mr. Gordon continues to work for the same employer, but now performs coding activities utilizing a large screen monitor and software to enlarge computer images. He sustained neither time loss from the job, nor a decrease in salary.

Job Site Modifications

To access his computer, Mr. Gordon initially used a plastic magnifier fitting over the computer screen. Later, he began using a closed-circuit television to access printed material. With the help of the Rehabilitation Engineer, it was determined that the computer system his employer uses included a magnification program. The supervisor working with Mr. Gordon at that time modified the system to track with a cursor, thus allowing access to a magnified graphical environment. Although he currently relies primarily on magnification for access, Mr. Gordon anticipates utilizing speech synthesis in the future and is already experimenting with and collecting information about various speech programs.

Problems with glare were also identified. Modifications to some of the lighting in the work area were recommended and accepted by the employer.

Job Restructuring

Mr. Gordon continued his work of laying out integrated circuits for approximately 2 years after he began losing his vision. Job duties became increasingly difficult, and Mr. Gordon was concerned that as his vision deteriorated, he might eventually be unable to perform them successfully. He initiated dialog with the employer regarding transfer to a programming position. The supervisor was receptive to that request and assisted him in gaining cooperation from management.

While efforts were underway to obtain adaptive equipment for Mr. Gordon, coworkers provided assistance by reading material to him. Reading assistance from coworkers is now seldom necessary; however, it is available when needed.

Training/Retraining

Mr. Gordon had an Associate's degree when he sustained his visual loss. Training in blindness issues, such as tasks of daily

living, Braille, and mobility training, was provided in the home, in the community, and at a local facility for the blind. Services were provided in the evening to accommodate Mr. Gordon's work schedule. Training in the use of adaptive equipment was minimal due to Mr. Gordon's technology background. On-the-job training was provided by the employer on an individual basis.

Transportation

Mr. Gordon stopped driving approximately 2 years before becoming involved with rehabilitation services. Transportation to and from work was an ongoing problem because the public transportation system in his city was not considered reliable. When he became unable to drive, his parents provided transportation, with occasional assistance from coworkers.

In an effort to minimize transportation problems, Mr. Gordon moved within 1 mile of his work site; he was subsequently transferred to another site approximately 8 miles from his home. After getting married, his spouse became his primary means of transportation to and from work with occasional assistance from coworkers. Currently, Mr. Gordon is attempting to arrange a job schedule where he can work at home approximately 2 days per week.

Motivation

Mr. Gordon related that to keep himself going throughout this process, he prayed. His persistence and his work kept him focused during rough periods. He feels he is accomplishing something, has a purpose, and is doing something of value when he works.

Rehabilitation Services

Mr. Gordon's optometrist arranged an evaluation for adaptive equipment at a low vision clinic. The low vision clinic sent a referral to the state agency, which coordinated services through the local agency. Rehabilitation services were initiated with Mr. Gordon in approximately 1987. The rehabilitation counselor contacted Mr. Gordon, told him that his case would be a priority since he was trying to retain his employment, and offered assistance, including financial help obtaining adaptive equipment.

Mr. Gordon participated in a monthly support group of persons coping with vision loss at a local agency. This group was a tremendous help to him as when he initially sustained his visual loss, he became isolated and did not want to mingle with others. The support group, and the encouragement received from a case worker at the local agency, helped him deal with these issues and become active again in social activities. The case worker arranged contact between Mr. Gordon and other persons who experienced a visual loss and encountered similar problems. These contacts served as a source of information and support.

The rehabilitation counselor scheduled the services of a rehabilitation engineer to assist in modifying Mr. Gordon's

workplace to accommodate his vision loss. A magnifier fitting over the computer screen and assistance from coworkers who read printed material were utilized until a closed circuit television could be obtained.

Adjustment to vision loss services were provided by a local agency and included mobility training and training in tasks of daily living, such as cooking, doing laundry, etc. Although Mr. Gordon was instructed in cane travel, he has not used a cane for several years.

Mr. Gordon stated that the most important service that vocational rehabilitation provided to him was letting him know what equipment was available and how it could be used in his work environment. The rehabilitation engineer and the rehabilitation counselor visited his job site, discussed these issues with the employer, and devised appropriate solutions to job-related problems.

Employer Issues

In regard to his employer, Mr. Gordon stated that management went out of their way to assist him. One of the older supervisors suggested that he look for another job, and some of the older employees were less receptive to efforts to modify the job. However, younger workers were generally more enthusiastic and cooperative regarding providing assistance. At this time, coworkers are eager to help.

The employer purchased all the adaptive equipment needed for the job. It took approximately 6 months to obtain the necessary equipment. The company has a strong commitment to affirmative action and equal opportunity issues. Additionally, the supervisor was supportive, documented Mr. Gordon's efforts to adapt to his job demands, and encouraged the company to work with him. Mr. Gordon had a good work history and the supervisor felt he deserved a chance to continue on the job. The job change was made in the midst of layoffs throughout the company, thus putting incredible pressure on Mr. Gordon to succeed.

The new supervisor provided on-the-job training on an individual basis at the job site. Since that time, Mr. Gordon has had several different supervisors, due to changes within the company. Although most of the supervisory staff were, and continue to be, cooperative, the initial supervisor had a significant impact on the company's decision to retain him.

Mr. Gordon described his current supervisor as very supportive. Recently, Mr. Gordon had the opportunity to transfer to another area, but elected to stay in his current position where he received a promotion.

Family Issues

Mr. Gordon stated that he could not have continued his employment without the support and assistance of his parents, especially his father, who provided transportation for him. His parents were agreeable to assisting him in other ways but he

tried not to ask them for help because he didn't want them to worry about him.

Ongoing Issues

Mr. Gordon continues to strive to keep up-to-date on technology issues and potential adaptive equipment. He expressed concern about the movement toward graphical user interface systems and how he will be able to handle working in that environment. He prefers to continue to use low vision equipment at this time but anticipates using speech synthesis in the future as his visual impairment progresses.

Rehabilitation Counselor Perspective

Mr. Gordon had limited knowledge of adaptive techniques and limited contact with persons who are blind until he began participating in rehabilitation with Mr. Clark. Mr. Gordon was apprehensive about his ability to maintain employment. Mr. Clark stated that Mr. Gordon was actively seeking help and was a highly motivated client. Mr. Clark's initial notes regarding Mr. Gordon state, "He's specifically interested in assistance in securing low vision aids and maintaining his employment."

The initial Individualized Written Rehabilitation Plan (IWRP) listed goals of improving visual functioning, developing skills for coping with visual loss, obtaining a closed circuit television, participating in rehabilitation instruction and mobility training, and rehabilitation engineering services. Mr. Gordon wrote the following comment on the IWRP, "I think that's fine. I just want to be able to continue doing what I am doing and become more independent in reading and interpreting technical material." Mr. Gordon was actively involved throughout the rehabilitation process.

Mr. Clark connected Mr. Gordon with another computer programmer who is blind and working for a trucking company. This provided peer support to Mr. Gordon and facilitated his involvement with a consumer group.

Job Site Modification/Job Restructuring

Although assistive devices would enable him to continue his work designing integrative circuits, Mr. Gordon was aware that the job tasks were very visually based and that with further vision loss, the job tasks could become increasingly difficult or

The support of the employer was a crucial factor in Mr. Gordon's ability to retain employment.

impossible to perform. Mr. Clark discussed employment options with Mr. Gordon and the decision was made to request a transfer to a programming position. The employer was agreeable and cooperated by providing training on the job.

The most important service that vocational rehabilitation provided to him was letting him know what equipment was available and how it could be used in his work environment.

The rehabilitation engineer visited the job site, recommended accommodations, and assisted in adapting equipment; lighting was also adjusted to reduce glare. A computer expert at the job site worked with the rehabilitation engineer in activating a magnification program that was already installed in the existing system. In addition to providing Mr. Gordon immediate access to his work, the program did not result in an expense for any party involved.

Training/Retraining

Mr. Gordon expressed an interest in learning Braille to assist him with note-taking for presentations at work. Although Mr. Gordon initially worked with an instructor a few hours each month on Braille, he eventually was referred to the Hadley School for additional instruction via correspondence courses.

Employer Issues

The initial contact between Mr. Gordon and Mr. Clark was conducted at the job site. The support of the employer was a crucial factor in Mr. Gordon's ability to retain employment. The employer was very supportive and agreed to do whatever was possible to retain Mr. Gordon. Mr. Clark wrote a letter to the employer supporting and encouraging the move to the programming position Mr. Gordon had requested.

According to Mr. Clark, management and coworkers realized that Mr. Gordon was a very good employee and were thus motivated to assist him. The corporate structure was also receptive to doing whatever was possible to assist Mr. Gordon.

A job analysis was completed at the job site, including an analysis of the visual functioning demands of working with various computer systems.

Personal Issues

Mr. Clark reported that Mr. Gordon's young age and personality, combined with a strong work ethic, were significant factors in his ability to retain employment. Mr. Clark stated that a strong work ethic is typical for persons residing in the

community. Mr. Gordon was also described as being a very easy going, nice guy. Although his case has been closed, the rehabilitation counselor continues to maintain contact with Mr. Gordon.

Recommendations

Mr. Clark recommended that rehabilitation counselors know the visual functioning and visual history of the client, as well as the client's opinion of what prospects for employment are available; then look at the job demands, both visual and emotional. Assess the employer's level of fear and knowledge about blindness and try to address these issues with whatever methods are necessary. Offer the employer assistance in providing adaptive equipment and/or modifying the job tasks. Utilize the services of a rehabilitation engineer to address technical issues and a mobility instructor to address travel and safety issues. It

He has "an inherent solid work habit"
that does not allow him to quit.

is not necessary to be an expert in every area; just know who to call on for help. Visit the job site and meet the supervisor, the manager, the coworkers, the safety department, and anyone else concerned with the job.

Employer Perspective

Mr. Gordon was in his current position as a programmer when his supervisor, Ms. Roe, was assigned to the unit. She has been in that position for approximately 1.5 years. Ms. Roe had no previous experience working with a person with a visual impairment. However, she reports having no concerns about Mr. Gordon's ability to do the job because he was performing the job successfully when she joined the unit.

When asked to what she attributed the company's willingness to retain Mr. Gordon, Ms. Roe stated, "...a good track record. He was a strong contributor and he was clearly retrainable and there was a need in another organization that he could fill."

Additionally, there are a number of persons with disabilities who have been encouraged to continue working, which is part of the company policy.

Mr. Gordon is currently employed at an engineering work station environment. Plans are to move him to a personal computer environment where there are more commercially available software packages for persons with visual impairments. Retraining will be

available to Mr. Gordon but it has not yet been determined if it will be provided on site or at another location. The employer will finance this retraining. Although he uses adaptive equipment, modification of job tasks to accommodate Mr. Gordon's visual limitations has not been necessary.

Ms. Roe has not been involved with any rehabilitation personnel, nor was she involved in the rehabilitation process. Mr. Gordon initiated most of the job accommodations with the employer. The employer would like to have more contact with the rehabilitation provider and be made aware of additional tools or equipment that might help Mr. Gordon continue to perform his job.

Mr. Gordon was recently promoted. As long as he is able to do the job equivalent to other workers of equal experience and training, he is eligible for additional promotions. Additional training or transfer to another area may be necessary for Mr. Gordon if he sustains total loss of vision. Additional equipment with Braille capability and more voice access would definitely be needed under those circumstances.

Coworker Issues

Mr. Gordon uses a scanner with a voice component. This creates more conversation in the work environment than is typical. There are three to four people in the office who interact visually with their systems. His coworkers have adapted to this change.

There is a large volume of information moving from desk to desk. At times, this information needs to be handled promptly. Frequently, coworkers read this information aloud to Mr. Gordon, so both acquire the information simultaneously. This cooperative spirit among employees is partially due to Mr. Gordon. He is not afraid to ask for help when he needs it, but he tries to maintain as much independence as possible. Coworkers are sensitive to his needs and management is encouraging of efforts to assist him. Mr. Gordon also provided coworkers with information about his condition. Occasionally, a coworker will run across information about vision loss in the workplace and will share it with other staff.

Personal Issues

According to the employer, Mr. Gordon is young and expresses a desire to remain an active, productive, and a contributing member of society. He has "an inherent solid work habit" that does not allow him to quit. His overall attitude is that he will overcome any barrier. He is willing to do more than his fair share to make his job situation work. He does not sit back and wait for others to find solutions to his problems. These personal characteristics have contributed to his success on the job.

His parents, particularly his father, have been very supportive. They provided help with transportation as did his spouse, who also holds a professional level position. Ms. Roe believes that the family provided a strong framework of support

to Mr. Gordon.

Recommendations

Ms. Roe stated that when working with a person with a visual loss, you must evaluate the entire person, including their ability to listen, to think, and to act, not just the ability to see or not see. Look at whether the person has the skills necessary to fill the job requirements and be agreeable to using different ways to accomplish the job.

The employer recommended that if you have a visual impairment, you must try to be as independent as physically possible. You must learn the physical layout of the building so you can operate within that setting. You must take ownership for the differences in how you perform tasks. Finally, you must keep management aware of your special needs. Don't assume they know what you need or what you can and cannot do.

Significant Other Perspective

Mr. and Ms. Gordon were married after Mr. Gordon's loss of vision. It is Ms. Gordon's understanding that her spouse initially had a difficult time adjusting to his visual loss. She stated that his connections at church facilitated his adjustment.

Job Restructuring

Although she had no contact with the employer, it is Ms. Gordon's understanding that Mr. Gordon was employed in a very visually demanding position. Mr. Gordon had very little training or experience as a programmer when he transferred to that position. He had to be very motivated to work and willing to adapt to the new position.

Ms. Gordon attributed the responsiveness of the employer to the corporate need for diversity in the workplace. Although the initial efforts were enthusiastic, the employer has not made ongoing efforts to keep Mr. Gordon's technology current with his needs.

Coworker Issues

In Ms. Gordon's opinion, coworkers have been understanding of her spouse's visual limitations. The coworkers are aware that it takes additional time for Mr. Gordon to learn new things and are cooperative in arranging transportation to training programs and assisting him with other training issues.

Personal Issues

In regard to continuing to work, the option of Mr. Gordon taking disability retirement was discussed but rejected. Mr. Gordon was not involved in many other activities and the prospect of remaining idle at home was not appealing to him. Mr. Gordon

hates to fail at any task and was both motivated to continue working and adaptable to making changes to keep his job.

Ms. Gordon takes some credit for motivating Mr. Gordon to continue to work. She told Mr. Gordon that he had to work as long as he could. Another incentive to remain employed is the lifestyle Mr. Gordon currently maintains. It would not be possible without his income.

Transportation

Ms. Gordon assumed major responsibility for assisting her spouse with transportation after their marriage. The employer allows him to have a flexible schedule, which is helpful in making transportation arrangements. Coworkers continue to provide transportation on an occasional basis.

Ms. Gordon assists Mr. Gordon with personal mobility. It is difficult for Mr. Gordon to cope with being unable to get around as easily as he would like. The loss of the independence associated with driving has been very difficult for him.

Future Concerns

Ms. Gordon stated that Mr. Gordon has ongoing concerns regarding how he will function on the job as his visual abilities deteriorate. The technology currently utilized on the job appears to be inadequate as his job tasks become more graphically oriented than text-based. These factors combine to make Mr. Gordon apprehensive about his ability to remain employed in his current position. Ms. Gordon admitted that disability retirement may be utilized in the future if Mr. Gordon finds himself unable to retain his job. Mr. Gordon would likely use disability benefits until he could become involved in some other activity.

Recommendations

Ms. Gordon recommended that if you are losing your vision, you should investigate all available resources and take advantage of everything available to you. Make people aware that you are interested in maintaining your current lifestyle with as few changes as possible. If you give up and quit, you will never know what you are capable of doing and what adaptations are available.

Ms. Gordon advised that if your significant other is losing their vision, you should be there when times are tough. Let your significant other know that if something can't be done, that is okay, but if they are just having a down period, they must keep going. There is a difference between feeling like you can't do something and really being unable to do it. We all have times when we feel we can't go on and yet we keep going. Provide the support that every spouse should have. Know when to give a kick in the pants and when to just provide an ear to listen to problems.

Survey Results

An analysis of the survey results found that all 4 persons responding were in agreement that cooperation with organized labor was "not important" in the subject's ability to retain employment. Respondents were in general agreement on three other items. All 4 respondents agreed that the employer, retraining, and the personal characteristics of the worker were "critically important" or "very important" to job retention. Although the employer did not respond to the item regarding the importance of the rehabilitation process, the other 3 respondents agree that it was either "very important" or "critically important".

Areas of some disagreement concerned the importance of the rehabilitation counselor, with the employer failing to respond to the item, the rehabilitation counselor ranking it as "somewhat important", the subject as "very important", and the significant other as "critically important". The rehabilitation counselor stated that a change in the job description was "somewhat important" but the other 3 respondents stated it was "critically important". In regard to the importance of a change in the physical surroundings at the job, the subject and significant other assigned a rating of 5, or "critically important", the employer a rating of "very important", yet the rehabilitation counselor stated it was "not important".

The subject assigned a ranking of 1 to transportation, indicating that it had "hindered ability" to retain employment. The rehabilitation counselor stated that transportation issues were "somewhat important" and the significant other and the employer stated that transportation issues were "critically important". The employer did not respond to the item concerning the importance of the significant other in job retention, though the subject and the rehabilitation counselor said this item was "not important" and the significant other said the role was "very important".

Financial issues were rated as "not important" by both the subject and the rehabilitation counselor; the significant other stated that financial issues were "somewhat important", and the employer stated they were "very important". In regard to coworker attitudes, the significant other and the rehabilitation counselor assigned a rating of 3, or "somewhat important", whereas the subject said they were "very important" and the employer said they were "critically important".

Table 2. Survey Results: Gordon

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	4	5	0	3
Rehabilitation process	5	4	0	4
Significant other	2	4	0	2
Employer	5	5	5	4
Change in job duties or job description	5	5	5	3
Change in physical surroundings at job	5	5	4	2
Cooperation with organized labor	2	2	2	2
Retraining	4	5	5	4
Transportation	1	5	5	3
Financial issues	2	3	5	2
Coworker attitudes	4	3	5	3
Personal characteristics of worker	4	5	5	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Dr. Max Gold

Worker Perspective

Dr. Max Gold has been employed as a psychologist with a federal health care provider in New England since approximately 1975. He has retinitis pigmentosa and sustained gradual vision loss. Dr. Gold lives with his spouse.

Job Site Modification

Job site modifications focused on access to print documents, initially through the use of hand-held magnifiers, and later a closed circuit television (CCTV). Dr. Gold subsequently began using a computer to generate reports and a scanner to access other print materials. He moved from using large print access software to voice synthesis as his visual condition deteriorated. When Dr. Gold began using a computer at his job site, clinical records were hand-written. Since that time, clinical records have been transferred to computers for staff convenience.

Job Restructuring

Few changes have been made at the job site to accommodate Dr. Gold's vision loss. His primary job duties include provision of therapy to adults, program planning, and case documentation. He is not, however, required to observe urine collections, a job male professional staff are frequently called upon to perform. Dr. Gold delegates periodic record reviews to other staff; he would perform this task personally if his vision allowed.

Training/Retraining

Dr. Gold was successful in learning to type and perform basic computing skills with the help of a typing tutor program. A rehabilitation engineer provided on-the-job training and

Working with computers has become a motivator that rejuvenated his interest in work.

technical assistance in computer use. Dr. Gold obtained training in orientation and mobility on an informal basis from professional colleagues. He subsequently obtained a dog guide.

Transportation

After approximately 1 year in his current job, Dr. Gold stopped driving. This created a major adjustment problem, as well as a transportation problem. He relied on a neighbor for transportation to and from work. Transportation issues influenced

Dr. Gold's decision to move to a home a short distance from his workplace. Because of this proximity, he seldom has difficulty securing transportation with coworkers. The home and workplace are also accessible by public transportation, and if necessary, Dr. Gold can walk to work.

Motivation

Due to concern that his visual condition would progress and render him unable to perform his job duties, Dr. Gold chose employment with a federal agency where disability retirement benefits would be an option. In his younger years, he experienced insecurity about his vocational and financial future. Disability retirement would provide approximately 40% of his income, but his lifestyle requires his entire income. Dr. Gold now has no plans to retire and hopes to continue his present employment the rest of his natural life. He enjoys working and wouldn't know what to do at home all day.

The biggest obstacle Dr. Gold overcame to remain employed occurred when he lost the ability to read standard print. Since becoming involved with computers, he has come to enjoy the technological aspects of the job as much as the clinical work. Working with computers has become a motivator that rejuvenated his interest in work.

Rehabilitation Services

Upon being diagnosed as legally blind, Dr. Gold's name was submitted to a statewide registry by his ophthalmologist. A social worker contacted him and offered a variety of services, including vocational rehabilitation (VR). At that time, Dr. Gold felt he was not in need of VR services, but he contacted the agency approximately 10 to 15 years later for assistance accessing print documents. The rehabilitation counselor met with Dr. Gold at the job site but did not contact the employer.

When his vision began deteriorating rapidly, Dr. Gold was examined by a low vision optometrist and prescribed reading glasses and magnifiers. He found using these devices tedious. Upon contact with state rehabilitation services, he learned about a CCTV. A vendor visited him at the job site and allowed him to try the CCTV, which proved helpful. Within a few months, a CCTV was obtained. The vendor provided brief training in its use.

Later, the rehabilitation counselor suggested a computer with large print. Dr. Gold was initially "computer phobic," did not know how to type, and did not want to learn to use a computer. Somehow, the rehabilitation counselor convinced him to try an old computer that was available. The rehabilitation counselor sent a rehabilitation engineer to assist him.

The rehabilitation engineer took Dr. Gold to the computer lab operated by the state rehabilitation agency and gave him a chance to examine several computer programs and various assistive devices. After they determined which programs or assistive devices would be most helpful, the rehabilitation engineer

installed them on the job site computer and provided training on their use. The rehabilitation engineer spent many hours at the job site working with Dr. Gold and his equipment. He also assisted Dr. Gold in adapting his home computer. Dr. Gold regarded the engineer as a "wonderful teacher".

Dr. Gold described himself as a "gadget person," always interested in mechanical devices. Once exposed to the computer, he quickly became dedicated to using it and now it is his primary hobby. Current computer use is primarily word processing tasks. Dr. Gold continues to use the CCTV for reading hand written notes but finds it much easier to write with a computer.

In regard to his rehabilitation counselor, Dr. Gold stated that they worked well together and became friendly. Dr. Gold continues to maintain contact with the rehabilitation counselor on an informal basis now that his case is closed.

Employer Issues

Dr. Gold did not discuss his problems accessing print with persons at the job site. Due to the size and complexity of the agency in which he works, supervision is somewhat diffused and professionals have a great deal of autonomy. Therefore, his supervisor may have been unaware that his difficulty completing job tasks was due to his vision loss.

Dr. Gold was initially reluctant to discuss his visual impairment, and many coworkers were unaware that he had a vision problem. That changed when he began using a white cane, a CCTV, and then a dog guide. Since that time, he has been more open about his lack of vision. In regard to having a dog guide, he stated, "...I feel special in a good way rather than stigmatized."

Other employees began using computers around the same time as Dr. Gold, and computers quickly became standard equipment. When Dr. Gold was in need of more modern equipment, the employer purchased it. Dr. Gold became a dedicated computer user and is frequently called upon by other members of the staff to provide information and assistance about computer issues. He developed relationships with other coworkers because of their mutual interest in computer technology.

Dr. Gold obtained additional adaptive equipment, such as a CCTV, through the Equal Opportunity Employment officer at the job site. There is no established process for an employee to procure adaptive equipment; Dr. Gold's length of service and familiarity with the staff involved assisted him in securing it. Although he was able to obtain the equipment, Dr. Gold sustained repercussions from his efforts in the form of bad feelings from some other staff. It is typically a struggle for an employee to obtain needed equipment and in other departments, up to 15 workers share one CCTV or scanner. Dr. Gold resigned from a job site committee designed to study ADA issues because he felt it was ineffectual.

In regard to patient contact, Dr. Gold's patients typically appear oblivious to his blindness. He related occasions when patients have given him written material to read or sign without appearing to realize he could not read it. Dr. Gold believes his dog guide makes patients and others feel more comfortable around him and him more comfortable around others.

There are not many positions Dr. Gold could advance to from his current job because he is not interested in administrative work. He enjoys patient contact and has reached the top of the career ladder where patient contact is the primary job duty.

Family Issues

Dr. Gold's spouse provided ongoing support during his progressive loss of vision. There were times when the adjustment process was difficult for them and they sought assistance through couples therapy. The adjustment to vision loss complicated any existing marital issues. Ms. Gold was supportive of his efforts to remain employed.

Recommendations

Dr. Gold advised others to remember that help is available, though it is not easy to find; try to hook up with others who know what resources are available. In regard to adjustment to blindness, Dr. Gold stated, "...in terms of the emotional aspect of it, I have always felt that it is never as bad as you think it is going to be. When I was younger and I knew I was going blind, it seemed like such a horrible thing. And people would say things to me, like 'How do you stand it?' or 'It is so awful.' You just live one day to the next. I was as happy a person as anybody else. And I have my choice of pleasures...". Dr. Gold also stated, "...I feel a lot better in recent years than I did when I was younger...Realizing that I could deal with what was going to come my way, the reality of being blind wasn't nearly as bad as my fears were."

It was a relief for Dr. Gold to begin using a cane because, "I realized that I had been expending an incredible amount of energy walking slowly and walking carefully, pretending that I didn't have visual problems. I would be embarrassed if I knocked something over. When I started using the cane, not only was I able to relax when I walked because I didn't have to worry about

Realizing that I could deal with what was going to come my way, the reality of being blind wasn't nearly as bad as my fears were.

walking into a tree or falling down a flight of stairs, I identified myself as a visually impaired person. People understood that when I knocked something that I wasn't just klutzy or I was not drinking. It was a 'coming out of the closet' kind of thing."

Rehabilitation Counselor Perspective

Mr. Clark, the rehabilitation counselor, received the referral from one of Dr. Gold's coworkers. Mr. Clark attributes Dr. Gold's continued successful employment to the timing of the intervention. Dr. Gold was feeling pressured at his job and was highly motivated to regain control of his vocational life. Mr. Clark and Dr. Gold were a good match; they had a lot in common (e.g., age, gender, similar history, and other personal issues) and related well to each other.

Job Site Modification/Job Restructuring

When the case was opened, Dr. Gold told Mr. Clark that he was struggling to complete some job duties. He was interested in a CCTV and other devices to utilize large print. Those items were provided. Although initially resistant to using a computer, Dr. Gold reconsidered and agreed to try. A used computer, with both large print and voice access software already installed, was introduced to Dr. Gold. Mr. Clark was unaware that Dr. Gold could not type. Dr. Gold used a typing tutor program and within 3 weeks could type 35 words per minute. Later, a computer and adaptive software were obtained for Dr. Gold, along with a scanner. Within 6 months from the date of referral, Dr. Gold had his equipment and was able to perform his job duties through use of assistive technology.

Dr. Gold told the rehabilitation counselor that his inability to read his own and others' case notes resulted in him falling behind on his job duties. The switch to keeping case notes electronically allowed him to keep his case notes current. Now, most of the staff use an electronic system. Rehabilitation services continued to update hardware and software.

Training/Retraining

Dr. Gold used a typing tutor program to learn to type on the first computer. The rehabilitation technologist provided training on the use of voice software. The vendor provided training on use of the CCTV. As Dr. Gold became proficient in computer use, he realized that he needed orientation and mobility training. That was provided, and he subsequently obtained a dog guide.

Transportation

Mr. Clark did not become involved with transportation issues. He was aware that Dr. Gold lived reasonably close to the

job site but did not know if he was able to walk to work.

Employer Issues

Because Dr. Gold utilized an independent computer system, it was not necessary to coordinate technical issues with the employer. Any accommodations the employer made, Dr. Gold requested and coordinated himself.

The employing agency operates a huge complex that includes a rehabilitation unit for persons who are blind. This may have

**Help clients get back the control the
vision loss takes away.**

influenced the employer's decision to work with Dr. Gold. There are seniority rules and other regulations consistent with federal employment.

Dr. Gold tried to hide his vision problem from coworkers. He became isolated from the rest of the staff. Upon learning that Dr. Gold was having difficulty with his job duties due to his visual impairment, the employer appeared concerned and agreeable to assisting him.

Personal Issues

Dr. Gold experienced a great deal of denial of his visual loss. This contributed to his problems on the job, in that the employer was unaware that he was having difficulty completing job duties due to a loss of vision. Counseling to assist Dr. Gold adjust to his vision loss was done on an informal basis. When Dr. Gold realized his coworkers would accept him, he established additional contacts and friends within the workplace.

Mr. Clark reported that rehabilitation services were offered at just the right time. Dr. Gold can be very focused when he wants to achieve something. He caught on to computers and immersed himself in it. He bought his own computer for home use. Dr. Gold was "clearly self-motivated." He is a "very bright, capable person and realized the value of what computers could do for him and how it could really impact on his job."

One of Dr. Gold's main strengths was his single mindedness, or his perseverance, in continuing his employment. He never indicated that he was considering retirement. Once he accepted his vision loss, he "realized that it wasn't the end of the world, that he could still work, and he could still do other things." He did not get deterred from what he wanted to do. It took Dr. Gold a long time to accept help. Dr. Gold also did a lot of the work himself to facilitate his job retention.

Mr. Clark never met Ms. Gold and only spoke with her on the telephone once. If he were to start the case over again, he would

increase his involvement with the family. He echoed Dr. Gold's comments about the use of a cane being a major step toward accepting his vision loss. Using a dog guide increased Dr. Gold's confidence and opened him to conversations with others in the workplace.

Recommendations

Mr. Clark recommended that other rehabilitation counselors look at the individual circumstances of each person to get a clue of what the client is doing and work from where the client is. Don't act like you have all the answers because having the answer doesn't mean you can get the job done. Help the person get to the point where they are willing to deal with the answer. Mr. Clark said his best advice is, "Know your client and be able to act when the person is ready." Timing is crucial. Sometimes if you wait, the client is no longer ready. Help clients get back the control the vision loss takes away. Giving clients control over their environment or over their work situation is important.

Employer Perspective

Dr. Burns, supervisor, was aware of Dr. Gold's visual problems for many years but never felt it was an issue in terms of employment. Dr. Gold has not demonstrated an interest in being promoted from his current position, which is currently at the highest level for his classification. Should he express an interest in transferring to another role, he would be a reasonable candidate. Dr. Gold's job placement in an outpatient clinic setting was made without regard for his vision impairment. Dr. Burns observed that over time, Dr. Gold's mobility became limited. His mobility was increased when he obtained a dog guide.

Job Site Modification/Job Restructuring

The assistive equipment Dr. Gold needed was regarded as a minimal problem and caused little concern to the employer. Computer hardware and software were obtained without any problem, though due to the nature of the federal system, the supervisor had to determine the process to obtain the funding for the equipment. Dr. Gold provided the information regarding what type of equipment was needed to perform his job duties and it was ordered.

It was not necessary to make any changes in Dr. Gold's job duties or job description to accommodate his vision loss. He continues to perform at the same skill level as any other employee in a comparable position.

Training/Retraining

Dr. Burns let the staff know that he was supportive of Dr. Gold's efforts and that Dr. Gold could utilize whatever services

were needed. Dr. Gold made arrangements for training in mobility and the use of assistive devices with other staff members. Dr. Burns speculated that it was a volunteer effort on the part of the staff.

Coworker Issues

Coworkers have not expressed any concerns regarding Dr. Gold's visual impairment. They have not received any training regarding vision loss. His coworkers expressed "a level of compassion and concern for others and so forth that pervades the system." Although he had no first-hand knowledge, Dr. Burns speculated that coworkers were accommodating and worked over time to make the environment more comfortable for Dr. Gold. Dr. Burns expressed an awareness that Dr. Gold may have addressed concerns or issues directly to others while Dr. Burns remained uninformed that a problem existed.

Personal Issues

Dr. Burns reported that Dr. Gold is an excellent member of the staff and is well thought of within the system. Dr. Gold "took the initiative in finding out about things and making arrangements." Dr. Burns regards him as very autonomous in his decision-making. Dr. Burns stated, "he is a very talented clinician and leader who has years of experience here, and there has been no evidence of any diminished quality or quantity of work."

**In this day and age, there is no reason
for a visual impairment to be a
limitation in most situations.**

Dr. Burns also stated, "an employer would have to be pretty prejudiced and be trying to find problems in order to act on them or be resistant to keeping him because with [him] there has never been anything to be unhappy about or complain about." Dr. Burns said, "I really give all the credit in the world to [Dr. Gold]; but there is something special about this place."

Recommendations

The employer recommended that persons with a visual loss take the initiative to acknowledge their deficits or weaknesses and identify the resources or supports needed. They should demonstrate a willingness and ability to take initiative to

gather information about resources rather than expecting others to do it. Relying on others for help can cause the person with the disability to become dependent and others to become resistant.

An employer hiring persons with a visual loss should be aware of the technology available and work as a manager to get the system to provide financial resources, or whatever it takes, to make things work for the individual. Dr. Burns said, "In this day and age, there is no reason for a visual impairment to be a limitation in most situations."

Significant Other Perspective

The significant other is Dr. Gold's spouse, Ms. Gold.

Job Site Modification/Job Restructuring

According to Ms. Gold, the employer was not perceptive of Dr. Gold's needs and expected him to function as a sighted person. There was no effort to make accommodations for his disability. Dr. Gold had to work hard to obtain adaptive equipment. He contacted rehabilitation services because he was unsuccessful in getting needed equipment through the employer. The rehabilitation counselor and rehabilitation engineer were helpful in getting Dr. Gold a computer so he could continue to perform his duties at the expected level.

Dr. Gold had to be very assertive in convincing the employer to make modifications to his job, when necessary. He was able to manage this successfully because he had worked within the system for years and was familiar with the bureaucracy, and also because he is very strong willed and determined.

There were physical barriers within the workplace the employer made no effort to reduce. Before he began using a cane or dog guide, these barriers caused Dr. Gold considerable difficulty.

Ms. Gold had no contact with the employer throughout Dr. Gold's vision loss and rehabilitation.

Coworker Issues

Ms. Gold had minimal contact with Dr. Gold's coworkers, but is aware of how Dr. Gold was treated through his comments to her. Some coworkers were unaware of his visual impairment until he began using a white cane and still others were unaware until he obtained a dog guide. Some coworkers have demonstrated a lack of sensitivity by making comments about Dr. Gold as if he were unable to hear them. Computer technology became a medium for fostering new relationships within the work environment. Dr. Gold and his coworkers began working together to resolve computer issues, thus leading to increased social support for Dr. Gold within the workplace. Most coworkers are now very supportive and helpful.

Training/Retraining

When Dr. Gold could no longer move throughout his work site independently, his spouse contacted her former coworkers at a rehabilitation center for the blind and requested help in providing mobility training to Dr. Gold. Dr. Gold went to the rehabilitation center in the evenings after working hours, and center staff visited his home to provide necessary training. Dr. Gold also used vacation time to visit the center for mobility training. He was not an official client.

Transportation

Dr. Gold rides with a coworker 1 week and the coworker drives Dr. Gold's car to work alternate weeks. It is very important for Dr. Gold to feel that the transportation arrangement is reciprocal. He does not want to be dependent on his coworkers.

Family Issues

Ms. Gold functioned as a sounding board for her spouse as he worked to keep his job. The most important thing she did was listen, not criticize, and be there for him, rather than push him into things before he was ready. She recognized that it was difficult for him to accept his visual loss, to begin using a cane, to decide to get a dog guide, and to say to the world that he was blind. However, once he did these things, his whole demeanor became much more positive and self-assured. He received more respect and became more confident.

When Dr. Gold experienced a severe loss of vision, the couple did discuss the possibility of his retirement. After assessing their financial situation, they decided that they could not afford for him to retire. At that time, which was before he began using computers, Dr. Gold was very down and was having difficulty getting his job duties completed. Ms. Gold feels that continuing to work was the right decision because Dr. Gold is so active, enjoys his work, and would likely have been unhappy staying at home.

Ms. Gold recognized the profound affect computer technology has had on her spouse. Computers opened many doors for him, both through increased efficiency at work and through the social network it generated. He was feeling very burned out at work and the computers appeared to rejuvenate him.

Personal Issues

Ms. Gold described Dr. Gold as a very quiet but strong person who is dedicated to his job and concerned about his patients. When he believes he is entitled to something, he is determined to fight for it. He is very meticulous, and makes an effort to look very professional every day.

Ms. Gold wishes her spouse would have participated in rehabilitation services earlier because the services had such a positive impact on his life. She realizes, however, that he was

not yet ready to accept help. She feels she accepted his loss of vision long before he did.

Recommendations

Ms. Gold advised others to be a support system for their spouse. Do what ever you can to show that you love and have confidence in the person. Do not push the person to do things before they are ready. Have empathy for what the person is experiencing. Put on a blindfold and try to go through a day and see how difficult it is; remember that when you are feeling impatient.

Survey Results

When results of the survey are examined, it appears that, while there is agreement among the four members responding to some items, on others, there is a moderate (1- or 2-point) discrepancy, and other items have up to a 3-point discrepancy. For example, there is general agreement that the rehabilitation process is somewhere between "somewhat important" and "very important" to the subject's job retention; that a change in the job duties or job description was "not important" to job retention; that financial issues were "not important" to job retention, though the significant other perceived financial factors as more important than the rest of the respondents; and that cooperation with organized labor was "not important" to job retention.

In areas where disagreement was found, the employer was most likely to be the respondent with the differing opinion. For example, in assessing the importance of the rehabilitation counselor to successful job retention, the employer assigned a rating of 2, or "not important". This contrasts with the subject and the rehabilitation counselor, who both assigned a rating of 4, or "very important", and the significant other, who assigned a rating of 5, or "critically important". Conversely, when assessing the importance of a change in the physical surroundings at the job, the employer assigned a rating of 4, or "very important" while both the subject and the rehabilitation counselor rated it as "not important", whereas the significant other rated it as actually "hindering" the subject in his efforts to retain employment. When assessing the importance of the personal characteristics of the worker, both the significant other and the rehabilitation counselor indicated that these characteristics were "critically important"; the subject stated that his personal characteristics were "very important", whereas the employer rated the subject's personal characteristics as only "somewhat important" to his ability to retain employment. The item assessing the importance of the personal characteristics of the worker in retaining employment yielded the highest overall rating for any item with a mean value of 4.25.

The subject responded differently from other respondents on two items. He rated retraining as "not important" to his ability to retain employment, whereas the employer and rehabilitation counselor both indicated it was "very important", and the significant other rated it as "critically important". In the case of coworker attitudes, the subject said these attitudes were "very important" in the ability to retain employment. The significant other rated the importance of the coworkers as "somewhat important" but both the employer and the rehabilitation counselor rated this item as "not important".

The significant other indicated that the employer "hindered the ability" of the subject to retain employment. The rehabilitation counselor rated the role of the employer as "not important" and both the subject and the employer stated that the employer's role in the ability of the subject to retain employment was "somewhat important". Transportation was another area where the significant other gave a very different response from the other respondents, indicating that it was "critically important" whereas the others assigned it a rating of 2, or "not important".

When assessing the role of the significant other in the subject's ability to retain employment, the employer and rehabilitation counselor both assigned a rating of 2, or "not important"; the subject assigned a rating of 3, or "somewhat important", whereas the significant other assigned a rating of 5, or "critically important".

Table 3. Survey Results: Gold

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	4	5	2	4
Rehabilitation process	4	4	3	3
Significant other	3	5	2	2
Employer	3	1	3	2
Change in job duties or job description	2	2	3	2
Change in physical surroundings at job	2	1	4	2
Cooperation with organized labor	2	2	2	2
Retraining	2	5	4	4
Transportation	2	5	2	2
Financial issues	2	3	2	2
Coworker attitudes	4	3	2	2
Personal characteristics of worker	4	5	3	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Ms. Geroux

Worker Perspective

When Ms. Geroux sustained a sudden and severe loss of vision secondary to complications from diabetes, she was employed as an administrative assistant with a major insurance firm. After several unsuccessful surgeries and an adjustment period totaling about 19 months, Ms. Geroux returned to work with the same employer as a clerical assistant. She provides typing support for a department of 60 persons, opens and stamps mail, and performs various other clerical tasks.

Ms. Geroux lives with her spouse in the northeastern part of the country, where they recently purchased a home.

Job Site Modification

The employer purchased adaptive equipment allowing Ms. Geroux to effectively complete her job duties. Her computer system includes a speech synthesizer. Ms. Geroux uses headphones that vocalize dictation into one ear and text output into the other ear with a delay of about 1 second. Although this process required an adjustment period, she is currently the top typist at the company.

Ms. Geroux experienced some difficulty navigating around numerous plants in the job site lobby. Upon learning of this problem, the employer had the plants removed.

Job Restructuring

After participating in an evaluation at a facility for the blind, Ms. Geroux decided that she was unable to perform all of the filing tasks required of an administrative assistant. Additionally, her position was filled during the 19 months she was off the job. The employer facilitated a transfer to a clerical assistant position at the same salary.

After participation in training at the local facility for the blind, Ms. Geroux participated in work-hardening and job-shadowing programs and part-time work with the employer for a 4-month period. Part-time status allowed Ms. Geroux additional time for adjustment to her new job, including such tasks as moving independently around the job site, learning to use the copy machine and answer the telephone, and adjusting to her vision loss. This period also gave her coworkers an opportunity to adjust to her as a person who is blind and to the adaptive techniques she utilizes.

The employer arranged to have Ms. Geroux become acquainted with the security personnel employed throughout the job site. This was a precautionary measure taken to increase the awareness of the security staff and to make Ms. Geroux more comfortable if she needed to seek assistance.

Training/Retraining

At the time of her vision loss, Ms. Geroux was a high school graduate. The state rehabilitation counselor arranged for personal adjustment training at the local facility for the blind. Training included personal management, homemaking skills, Braille, and orientation and mobility lessons. Training on adaptive job equipment was initiated at the facility for the blind and continued on the job site. After concluding training in the rehabilitation facility, Ms. Geroux received services through the employer, including job-shadowing and work-hardening, part-time for 4 months. She then returned to full-time employment.

Currently, Ms. Geroux is enrolled in self-study courses through an insurance association. The association records the books on tape for her. Exams are completed with the assistance of a reader at the designated testing site. She finds using a reader

The employer's offer to retrain and rehire her was the motivating factor that convinced Ms. Geroux to return to work.

more efficient than attempting to take the exam in Braille, which is also an option.

Should additional training be needed on new computer equipment or systems, the employer would provide it on an individual basis at the job site. A specific employee works with Ms. Geroux on these issues and has accompanied her to seminars at other locations.

Transportation

Ms. Geroux initially used a cab, which the employer paid for, to get to work and her spouse provided transportation home from work. Later, she utilized a transportation service at a reduced cost to travel to and from work. The state rehabilitation counselor coordinated this service. Currently, Ms. Geroux relies on her spouse for transportation. Coworkers provide transportation when he is unavailable, but transportation concerns remain an ongoing issue.

Motivation

When she lost her vision, Ms. Geroux was unaware of the adaptive equipment that could be utilized to assist her in performing her job duties and assumed that there would not be many jobs available to her. She was surprised that she could type without being able to see. Upon learning about the adaptive equipment available to her, she was intrigued and encouraged.

Although she wanted to work, Ms. Geroux might have been intimidated by the thought of approaching a new employer and

entering a new environment. The employer's offer to retrain and rehire her was the motivating factor that convinced Ms. Geroux to return to work. Ms. Geroux enjoys working and gets along well with her coworkers.

Financial factors were also an issue for Ms. Geroux, who reported that her long-term disability policy benefits would discontinue 2 years after leaving employment. She and her spouse are making house and vehicle payments and rely on two incomes.

Ms. Geroux enjoys her job and interacting with the people with whom she works. The opportunity to be active and interact with others is a motivating factor to work. She has no plans to leave her current position as she is happy with the work and the people.

Rehabilitation Services

The rehabilitation counselor from the state agency worked jointly with the employer and a rehabilitation counselor assigned from the long-term disability policy carrier. A representative from the employer's Department of Human Resources and the state agency rehabilitation counselor met with Ms. Geroux in her home to plan her return to work. Until the phone call from the state rehabilitation counselor to schedule this meeting, Ms. Geroux was unclear what services were available to her or whether she would be returning to work with the employer.

Ms. Geroux feels the state rehabilitation counselor's very positive attitude and encouraging manner facilitated her return to work. The rehabilitation counselor offered various options, gave examples of others with more severe disabilities who had returned to work, and provided ongoing support. The rehabilitation counselor also met with the staff at the facility for the blind to review Ms. Geroux's progress, and with the employer after Ms. Geroux returned to work.

Employer Issues

Ms. Geroux attributed her ability to retain employment to her employer, who initiated contact with her after her vision loss and offered to retrain and rehire her. The employer was cooperative with job restructuring, job modification, retraining, and support. Additionally, the company is very people-oriented; the nature of the business involves contact with persons utilizing long-term disability benefits, and the employer is one of the leading corporations in facilitating return to work with persons with disabilities. These factors, combined with Ms. Geroux's work record as a good and dedicated employee, influenced the employer's motivation to retain her.

Ms. Geroux stated that her coworkers were initially hesitant about saying the wrong thing in front of her. She did not want them to feel as if they had to be cautious around her, so she used humor to break the ice with them. The coworkers have since become more comfortable.

Ms. Geroux is comfortable with her new supervisor, who makes

sure that either coworkers read written correspondence or that correspondence is on tape. Communication is facilitated through meetings every 2 weeks where any issues are discussed. Ms. Geroux received a favorable report at her last mid-year review.

Promotion is an option for Ms. Geroux; however, she prefers to stay in her current department at this time. It is Ms. Geroux's opinion that as the employer computerizes all aspects of the business, her opportunity to be promoted to another position becomes increasingly equal to the opportunity of a sighted worker. She anticipates having the opportunity to become an examiner, then a disability specialist, and then a senior specialist.

The employer sent another worker who is blind and had been with the company for several years to meet with Ms. Geroux. They talked at length and the other worker encouraged Ms. Geroux to remember not to give up because other people have succeeded at work.

The computer system Ms. Geroux uses is not compatible with the computer system utilized by the company and efforts are currently underway to change her software to make it compatible. A computer systems technician is learning about the adaptive equipment Ms. Geroux uses so that technical support can be provided as needed.

Family Issues

Shortly before returning to work, Ms. Geroux was married. Her spouse, family, and friends made a real difference with the support they provided. Ms. Geroux was "going stir crazy" when she was home all day and for this reason, her spouse supported her return to work. Her parents were pleased that she has remained active.

Recommendations

Ms. Geroux made the following recommendations to others with a visual loss: Do not give up, despite feelings of frustration; resources are out there, just be persistent in locating them. Also, remember that there are others who have successfully returned to work with a vision loss.

In regard to rehabilitation professionals, Ms. Geroux recommended that they have patience with their clients, as adjustment to vision loss is a tremendous task. Although the adjustment may proceed more slowly than the rehabilitation

Both my personal life and professional life were drastically changed and I couldn't deal with the professional part until I resolved the personal part.

counselor would like, have patience and give the client time to adjust to changes. Frequently, rehabilitation counselors and teachers do not know what their clients are facing and how difficult it is. It is important for professionals not to push clients faster than they can go. Ms. Geroux stated, "Both my personal life and professional life were drastically changed and I couldn't deal with the professional part until I resolved the personal part."

Rehabilitation Counselor Perspective

The rehabilitation counselor, Ms. Jones, stated that Ms. Geroux returned to work faster than any other person with whom she has worked. Ms. Jones and the local facility for the blind received simultaneous referrals from Ms. Geroux's ophthalmologist. A meeting with Ms. Geroux, Ms. Jones, and the employer was conducted, the IWRP was developed, and adjustment training was initiated within 1 month of referral.

When Ms. Jones initially contacted Ms. Geroux, she found her confused about the future and how her daily life activities could be handled. As Ms. Geroux became more familiar with services and adaptive techniques available to her, she became increasingly involved in her rehabilitation.

In addition to the rehabilitation counselor assigned by the state agency, the employer assigned a rehabilitation specialist to Ms. Geroux. And as part of a long-term disability policy provided by the employer, Ms. Geroux was assigned another rehabilitation counselor. All three rehabilitation providers worked together to facilitate Ms. Geroux's successful return to work.

The employer's rehabilitation specialist initiated contact with the state rehabilitation counselor and requested assistance returning Ms. Geroux to work. The company and state rehabilitation providers had worked together in the past. Expenses associated with adaptive equipment for work were assumed by the company and the insurance policy rehabilitation providers, while the state agency paid for facility training and personal adjustment equipment.

Ms. Jones admitted that the rehabilitation process proceeded more quickly because the employer purchased the equipment. If the state agency had to purchase the equipment, Ms. Geroux "would still be sitting at home waiting for us to get it." In general, obtaining adaptive equipment with state agency funds is a laborious and time-consuming process. Rehabilitation counselors are limited regarding which types of computers and equipment they are allowed to purchase and are forced to pay a fixed price. Counselors typically utilize the services of a technician at the rehabilitation facility, which is private, to determine equipment needs, purchase the equipment, then bill the agency for this

service.

Training/Retraining

Ms. Geroux participated in adjustment training at the local facility for the blind. Training included activities such as personal management, Braille communication, diabetes management, mobility, and daily living skills. Ms. Geroux learned Braille faster than any person in the history of the facility. A vocational evaluation was conducted, and training was initiated at the facility and continued on the job site.

Job Site Modification/Job Restructuring

Ms. Geroux returned to temporary work in her previous position while another job was being located. The previous position was in a very high profile environment, so a job coach was hired from a private agency to expedite Ms. Geroux's return to work. After Ms. Geroux returned to work, the job coach coordinated services among the rehabilitation providers, including the mobility instructor from the rehabilitation facility and the rehabilitation engineer. The services of the job coach allowed Ms. Geroux to concentrate on learning the job tasks rather than coordinating equipment needs, mobility concerns, etc., and also provided one point of contact at the job site for other rehabilitation providers involved.

Ms. Geroux performs her job tasks by utilizing a computer with voice output, Braille, a note-taking device, and an optical recognition scanner. Mobility training was provided at the job site several times, as well as at the rehabilitation training facility.

Transportation

Transportation was a problem for Ms. Geroux, who had difficulty navigating the bus system. She relied on cabs for a short period, but the expense was prohibitive. Ms. Jones provided transportation funds for a short period, then referred Ms. Geroux to a transportation service for people who are elderly or have disabilities. Ms. Geroux used this service for a time, but finally made independent transportation arrangements.

Ms. Jones has a caseload of approximately 89 persons. The job coach was a big help to her in providing services to Ms. Geroux.

Employer Issues

The rehabilitation counselor reported that the employer has a reputation of working cooperatively with persons with disabilities and makes every effort to return employees who become disabled to work. The rehabilitation specialist assigned by the employer was very goal-oriented and worked well with Ms. Geroux. Although the position Ms. Geroux had at the time of her injury was subsequently filled, the employer guaranteed her a job within the company.

Ms. Geroux was made aware of various openings within the company. The employer was also involved in her training at the local facility. The rehabilitation providers from the employer and the insurance policy learned about adaptive equipment necessary to facilitate her return to work. Together, Ms. Geroux and the rehabilitation providers developed a vocational goal and planned Ms. Geroux's return to work.

Meetings were held with several department heads and the Human Resources representatives in an effort to locate an appropriate job match for Ms. Geroux. Her name was placed on a priority list for rehire. Her permanent job assignment is in the re-insurance department, handling typing for persons who travel a significant amount.

The state rehabilitation counselor provided in-service training to the coworkers at the job site, as well as to the coworkers in the department Ms. Geroux worked in before her loss of vision. Coworkers were receptive to this training program and to Ms. Geroux's return to work.

Personal Issues

Ms. Geroux was described as "tough as nails," with a "strong, no-nonsense" personality. Although her vision loss was sudden, she did not exhibit signs of depression. Instead, she immediately began working on acquiring adaptive skills. According to Ms. Jones, Ms. Geroux was married shortly after her vision loss and the support of her spouse and her family, combined with Ms. Geroux's personality, gave her the confidence to pursue rehabilitation and return to work. Concerns about Ms. Geroux's overall health status due to her diabetes continue to be an issue.

Ms. Geroux wrote a letter to the CEO of the company thanking him for the cooperation she experienced with everyone at the company regarding her return to work. This letter generated recognition to some staff from the CEO, which was very much appreciated. The employer has since provided time off from work to Ms. Geroux to speak to others with a vision loss about clerical employment.

Recommendations

Concentrate on the worker first; help the worker gain the skills necessary to be independent. A person can't improve these things and try to work at the same time; it is too stressful. It is better to have the person take time off, learn adaptive techniques, then return to work when feeling more comfortable. Other services, such as mobility or computer assistance, should be available on an ongoing basis after the person returns to work.

Employer Perspective

According to Ms. Geroux's supervisor, Ms. Wynn, the employer is an international management company providing long-term disability coverage. It is company policy to provide whatever accommodations are necessary to allow workers who become disabled to continue on the job, including restructuring and modifying jobs. This was Ms. Wynn's first experience with a coworker sustaining a visual impairment.

Job Site Modification

The primary job site modification was providing access to computer equipment. Currently, Ms. Geroux operates a computer system adapted for speech synthesis, but it is incompatible with other clerical staff computer systems. Efforts are currently directed toward training Ms. Geroux on a computer system adapted for her use and also compatible with other computers.

Job Restructuring

Ms. Geroux did not return to work in her previous capacity as an administrative assistant but as a clerical assistant. She is able to perform all of the duties required of a clerical assistant, so the job description was not modified. In addition to typing, the job includes answering the telephone, taking messages, opening and stamping mail, etc.

Training/Retraining

Ms. Geroux was initially trained to perform clerical tasks at the rehabilitation facility. The facility will be training Ms. Geroux at the job site on the new computer equipment purchased by the employer, thus insuring compatibility with other computers. Ms. Geroux typically handles arrangements with the state rehabilitation providers; there is no ongoing contact between the employer or supervisor and the state rehabilitation provider.

Coworker Issues

The employer utilized the services of an in-house rehabilitation coordinator to facilitate Ms. Geroux's return to work. Prior to Ms. Geroux's return, the rehabilitation coordinator scheduled a meeting with other personnel in the department and discussed what it would be like to work with someone who is blind. Staff were cautioned about issues such as keeping aisles clear to avoid accidents. Coworkers were very receptive to Ms. Geroux returning to the work environment.

Personal Issues

Ms. Wynn describes Ms. Geroux as a wonderful employee and a very quick learner. Ms. Geroux is not afraid to try new things, is open about her blindness, and takes advantage of training opportunities. She is currently regarded as the primary typist

for the entire department.

In addition to the support of the employer, Ms. Geroux has a supportive spouse and family, and a network of persons who have assisted her. These factors, in addition to Ms. Geroux's high motivation level, facilitated job retention. It takes a team approach to achieve success on the job.

Recommendations

The employer recommended that other employers be supportive of the employee, who is frequently facing a very difficult situation. As many accommodations as possible should be provided. Although the employer should try to retain the worker, worker motivation is going to be the key issue in whether or not retention is successful.

Significant Other Perspective

Ms. Geroux's spouse stated that Ms. Geroux chose not to stay home all day and that the employer gave her the incentive to return to work by providing support and personal assistance.

He described Ms. Geroux as very independent. The couple never discussed the option of Ms. Geroux **not** returning to work; it was always **when** she was going back to work, and she returned to work in record time. Mr. Geroux stated that Ms. Geroux has "almost a photographic memory with numbers," which helped her learn adaptive techniques to perform job tasks.

Mr. Geroux related that the employer used this situation to generate positive publicity for the company. Ms. Geroux participated in promotional activities for the company and allowed pictures of herself to be used in public relations publications.

Coworker Issues

Some coworkers were initially insensitive to Ms. Geroux and

**It takes a team approach to achieve
success on the job.**

assumed that because she could not see, she also couldn't hear, and would speak in an extraordinarily loud voice when addressing her. Ms. Geroux was able to handle these problems and the situation has been reasonably resolved.

Rehabilitation Services

Mr. Geroux reported attending some of the meetings at the facility for the blind. All reports about Ms. Geroux were

positive and the staff answered their questions. He believes that the most important service was teaching Ms. Geroux how to use a computer and obtaining one for her at work.

Family Issues

Mr. Geroux, Ms. Geroux's parents, brother, and grandfather provided support to Ms. Geroux throughout her surgeries and return to work. Ms. Geroux is very independent and Mr. Geroux does not offer to do things for her that she can do herself.

Recommendations

Mr. Geroux stated that acceptance is the key. Couples should deal with problems and concerns day-by-day, not dwell on the negatives, and talk to each other about how they feel.

Acceptance is the key.

Survey Results

A review of the surveys finds that the subject, Ms. Geroux, and the significant other, her spouse, are in total agreement regarding the impact of all survey items on Ms. Geroux's job retention. All 4 respondents agreed that the role of both the rehabilitation counselor and the rehabilitation process were "critically important" in the subject's job retention. Additionally, all 4 respondents indicated that the role of the employer and coworker attitudes were either "very important" or "critically important" to job retention. The subject and the significant other indicated that organized labor "hindered" job retention and the employer and the rehabilitation counselor stated it was "not important".

Both Ms. Geroux and her significant other indicated that transportation and financial issues were "critically important" to job retention, whereas the employer and the rehabilitation counselor both stated it was "somewhat important". In regard to the importance of the personal characteristics of the worker, the employer assigned a rating of 3, or "somewhat important" whereas Ms. Geroux and her spouse stated this item was "very important" and the rehabilitation counselor stated that the personal characteristics of the worker were "critically important".

Retraining was rated as "critically important" by the employer but the other 3 respondents rated it as "somewhat important". A change in the job duties or job description was regarded as "not important" by the employer, "somewhat important" by Ms. Geroux and the significant other, and "very important" by the rehabilitation counselor. Changes in the physical

surroundings at the job were regarded as "critically important" by Ms. Geroux and her significant other, "very important" by the rehabilitation counselor, and "somewhat important" by the employer. The role of the significant other was rated as "somewhat important" by Ms. Geroux and the significant other, "very important" by the employer, and "critically important" by the rehabilitation counselor.

Table 4. Survey Results: Geroux

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	5	5	5	5
Rehabilitation process	5	5	5	5
Significant other	3	3	4	5
Employer	5	5	4	5
Change in job duties or job description	3	3	2	4
Change in physical surroundings at job	5	5	3	4
Cooperation with organized labor	1	1	2	2
Retraining	3	3	5	3
Transportation	5	5	3	3
Financial issues	5	5	3	3
Coworker attitudes	5	5	4	4
Personal characteristics of worker	4	4	3	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Mr. Sanchez

Worker Perspective

Mr. Sanchez is pastor of a small church and is employed as a computer salesperson in a small western town. In addition to sales duties, he provides computer support to the management office.

Mr. Sanchez's visual diagnosis is retinitis pigmentosa. He completed college while still able to read regular print, though he has never been able to drive. He and his spouse have five children. His spouse does not work outside the home; their children are home-schooled.

Job Site Modification

At his sales job, Mr. Sanchez has a computer with adaptive equipment supplied by the rehabilitation counselor. He also has software for other computers at the job site. Mr. Sanchez learned to control other computers from his computer without a modem, so he utilizes his computer with large print adaptation to work on files in other computer systems. The rehabilitation counselor also provided a computer system with adaptive equipment for Mr. Sanchez's duties as pastor at the church.

When Mr. Sanchez delivers and assembles computer systems he has sold, he relies on his spouse to provide transportation. He has not discussed any other means of transportation with the employer or the rehabilitation counselor. Transportation is a problem with marketing activities. Mr. Sanchez would like to approach more businesses about purchasing computers from the employer.

Currently, Mr. Sanchez is assembling computers and experiences some difficulty identifying parts. He plans to use Braille tags to label parts. When he needs help, he asks for it, but he asks as seldom as possible.

Training/Retraining

An itinerant rehabilitation teacher provides training to a group of five to seven persons at a local Senior Center approximately every 4 to 6 weeks. At one time, the teacher provided individual training every 4 weeks for 1 to 1.5 hours but that has been changed to group training due to budget cuts. A peer tutor helps Mr. Sanchez with Braille skills, though Mr. Sanchez sees him sporadically.

Mr. Sanchez is attempting to use a screen magnifier to teach himself Windows.

Transportation

Because he lives in a small city and his home is centrally located, Mr. Sanchez walks most places. He travels independently in brightly lit areas by paying close attention to traffic flow;

he is unable to read street lights. When walking at night, he relies on his children for assistance. When traveling farther away, his spouse drives him.

Motivation

Since college, Mr. Sanchez has continually engaged in employment. He never considered not working. He was aware that his vision would deteriorate and that he needed skills to support himself and his family. He considers himself a very independent person, who is unwilling to rely on others or the government for support.

Mr. Sanchez describes himself as a born again Christian, and states, "certainly inherent in Christianity is a work ethic. Not only being able to help myself but to help others." He believes parents teach their children by example and he tries to be a good example for his children.

Rehabilitation Services

A rehabilitation counselor contacted Mr. Sanchez and asked him what he needed. At the time, he was unclear what services he needed, but his primary desire was to continue working. He contacted a Lion's Center program for persons with low vision. Adaptive computer equipment was demonstrated to Mr. Sanchez, but he did not request it and none was recommended by the counselor. Approximately 4 years later, Mr. Sanchez was having increased difficulty reading the computer screen; he contacted the counselor and requested assistance purchasing software to magnify computer images. The counselor provided the software as well as the hardware (i.e., a computer and large screen monitor), and a CCTV.

The counselor supplied several new magnifiers to assist Mr. Sanchez in reading printed documents so that he could study for the C.P.A. exam. Mr. Sanchez was pleased with the rehabilitation counselor, who was compassionate, professional, and very warm and friendly. She visited the job site but did not meet with the employer.

Although Mr. Sanchez was aware of his own goals (i.e., to remain self-sufficient and employable), he was never clear what the goal of the rehabilitation counselor was. He remains vague about what could or could not be provided by the rehabilitation counselor, and speculated that the counselor might feel knowing the goal would be counter-productive to rehabilitation success. He worked with four or five counselors in a very short period of time.

Currently, Mr. Sanchez has two computer systems with

He was never clear what the goal of the rehabilitation counselor was.

adaptive equipment, one at his church work site, and the other at his computer sales job site. The rehabilitation counselor provided the entire system for the church job and the adaptive equipment only for the sales position.

Although he has been offered the opportunity to participate in rehabilitation training at a rehabilitation center to learn Braille, mobility, and other skills, Mr. Sanchez declined. He is unable to leave his job and income, or his family, for the 6-week commitment that participation in the rehabilitation center training program requires. The rehabilitation counselor connected Mr. Sanchez with a peer tutor to assist him in learning Braille.

The rehabilitation counselor authorized payment for eye surgery for Mr. Sanchez. Financial assistance for medical care has been utilized in the past and Mr. Sanchez anticipates the possibility of needing such assistance in the future. Mr. Sanchez will continue to need assistance obtaining new technology. He expects to need hardware and software for voice synthesis.

Employer Issues

When Mr. Sanchez contacted the employer about a possible job, the employer had been informed by their mutual friend that Mr. Sanchez has a visual impairment. Mr. Sanchez believes his employer was motivated to hire him because of faith in Mr. Sanchez's ability to complete the job duties, because the employer is a Christian who wanted to give another Christian man a chance to work, and because disabilities do not matter to the employer, but honesty and hard work do. Two other employees with disabilities work for this employer.

The employer was agreeable to providing part-time employment that did not conflict with Mr. Sanchez's responsibilities as a pastor. Mr. Sanchez has been working for the employer for 4 years. After successfully resolving computer and payroll issues, he transferred to a retail outlet and began work in computer sales.

Coworker Issues

Coworkers have displayed some negative behavior toward Mr. Sanchez. He attributes this behavior to the favored status he has with the boss rather than a result of his blindness. At his current job, he is not required to be on the sales floor. Instead, customers interested in computers are referred to Mr. Sanchez and he meets with them in the rear of the store. Gradually, coworkers have become more accepting of Mr. Sanchez. The technicians have been particularly helpful to him in learning more about the equipment he sells.

In comparison to other workers, Mr. Sanchez estimates that he works about 75% of what other employees work and that he earns about 100% more than other workers. He would likely earn even more if employed in a larger labor market. Mr. Sanchez attributes his high salary to the specialized and diverse skills that he provides. The employer also respects his church work and admires

Mr. Sanchez because he has not used his vision problem as a reason not to work. Coworkers are not aware of Mr. Sanchez's financial arrangements with the employer, though they do know that he works fewer hours.

In general, Mr. Sanchez gets along with other workers. He states, "I try to keep my attitude right and realize everybody has their problems. I don't want to add to their problems. I want them to like me and like working with me. I want to be helpful and valuable to them as an employee."

Family Issues

Mr. Sanchez's father is Hispanic and grew up in New Mexico. He was one of nine siblings in an extremely poor family, yet all the children managed to get an education, good jobs, and become middle-class families. His parents were hard workers and wanted their children to do better than they had done. They passed their lifestyle down to Mr. Sanchez by example. His father instilled in him the expectation that he would attend college.

Although his children appear to take his visual disability

He compensated for the visual loss by memorizing information or using large pens with bold black ink. He made a conscious decision not to tell people about his vision loss and few coworkers were aware of it. Those who did know, expressed warmth and support.

in stride, Mr. Sanchez admits his vision loss has been difficult for his spouse. His spouse has not "indulged in a pity party," but he knows she worries about him. Additionally, his spouse has a great deal of faith and "sincerely wants this condition to be healed." His spouse demonstrates a positive attitude and points out persons who are blind and have succeeded in business.

Personal Issues

Approximately 20 years ago, Mr. Sanchez began having difficulty reading hand writing and later, regular print. He was employed as a business administrator with a large church. He compensated for the visual loss by memorizing information or using large pens with bold black ink. He made a conscious decision not to tell people about his vision loss and few coworkers were aware of it. Those who did know, expressed warmth and support.

Mr. Sanchez's vision problem became so obvious his supervisor confronted him and asked what plans he had to deal

with it. The supervisor suggested training in Braille. He also suggested that Mr. Sanchez change his career path from accounting to becoming a pastor in a church. Because the supervisor was a trusted and respected friend, Mr. Sanchez contacted a rehabilitation counselor, though he did not request services.

Mr. Sanchez's vision continued to deteriorate. He worked as a general manager for two Christian radio stations. He began using a computer as a means of keeping current with his work. When Mr. Sanchez finally decided he needed assistive devices, he contacted the rehabilitation counselor, who provided them. It was around this time that Mr. Sanchez also stopped hiding his vision loss from friends and coworkers. The equipment allowed Mr. Sanchez to read reports and memos without difficulty. It was the critical factor in his ability to maintain his job. He asked coworkers and those he supervised to provide in advance any handouts distributed at meetings so that he had time to review them with his equipment.

Several years later, Mr. Sanchez had an opportunity to become a pastor at a small church. He took that job and left behind his work with a large organization and transferred the equipment to his church work. He made notes with a large marking pencil and worked on improving his memory.

How he performs his duties as pastor has never been an issue with the congregation of his small church. To Mr. Sanchez's knowledge, his vision loss has only been mentioned in a negative context one time by one member of the congregation. Other members of the church have complimented him on his ability to perform his duties with his limited sight.

The small church experienced financial difficulties, and Mr. Sanchez found it impossible to support his family on the limited income he earned as a pastor. He began doing consulting work as a C.P.A. or as a computer specialist. Although this supplemented his income, it still was not enough to support his family. He began seeking regular employment in the private sector. A church member began giving him assistance in contacting persons for possible jobs, and eventually referred him to his current employer.

Mr. Sanchez enjoys his job, but hopes to become a full-time pastor in the future. If his current church does not expand, he

The equipment allowed Mr. Sanchez to read reports and memos without difficulty. It was the critical factor in his ability to maintain his job.

intends to move to a larger church community.

Recommendations

A person must accept their vision loss the best way they can, then they must figure out what they can do. Accept that there are certain professions from which you will be excluded. Find a way to do the things you can do. Start as early as possible. Mr. Sanchez believes that he, "wasted a lot of years because of fear and laziness and just procrastination...That was a big pride trip with me at the time and I probably should have been learning Braille and beginning to do more preparation." Mr. Sanchez said he didn't think he would have listened to anyone who encouraged him to prepare earlier but that it might have been helpful to speak with someone who had gone through the experience of losing sight and could discuss it with him in a blunt manner.

People with a vision loss shouldn't expect the employer to make any accommodations because of their visual disability but should make the employer aware of what they can and cannot do. Believe in yourself and try and learn the job and deal with surroundings the best way you can. Go on living. "Put forth extraordinary effort to be ordinary." Be at ease with the employer; don't have a chip on your shoulder. "Nobody wants to deal with someone with an attitude problem." As Mr. Sanchez tells his son, "Go to college and learn a skill and learn a trade. Make people glad to be around you. Be valuable; that is what employers pay for--somebody who's going to help their business and make them more successful and do a good job and get along with the other employees."

Mr. Sanchez believes people who are blind face "a natural prejudice" against them. He advised, "Joke with people. It will put them at ease. Accept their jokes and do not get all defensive about it."

Employers hiring persons with disabilities should "treat them the same as anybody else, then stand back a little bit. Don't press them too much. Give them a chance to see if they are going to rise to the occasion." Mr. Sanchez believes persons with disabilities adjust and try to be good employees. Although employers should provide help when asked, help should not be provided automatically.

Mr. Sanchez believes a sighted significant other should provide "compassion, but not pity to a person who is blind. When a person who is blind is experiencing self-pity, the worst thing you can do is give more pity." When Mr. Sanchez engages in self-pity, he needs someone to say, "You are doing pretty good but you can sure do a lot better."

Rehabilitation Counselor Perspective

The rehabilitation counselor, Mr. Johnson, did not assist Mr. Sanchez in obtaining his current job but did provide postemployment services. The previous counselor assisted Mr. Sanchez in becoming a C.P.A. Mr. Sanchez's rehabilitation file was closed and re-opened when additional services were requested.

Job Site Modification/Job Restructuring

Software and a large screen monitor were provided to assist Mr. Sanchez on the job. Obtaining this equipment took approximately 6 to 8 weeks. Mr. Sanchez already had a computer, quite a bit of software, and a CCTV, provided by a rehabilitation counselor in another state. The employer did make additional space available for Mr. Sanchez's equipment at the job site.

Training/Retraining

Mr. Sanchez receives Braille training monthly from a field instructor.

Transportation

The community is very small, so Mr. Sanchez is able to walk to work. No public transportation is available.

Employer Issues

Mr. Johnson was introduced to the employer, but had no ongoing contact with him. They did not discuss Mr. Sanchez's employment or job duties. Mr. Johnson is aware, however, that no other employees have a comparable position.

Personal Issues

During the time they worked together, Mr. Sanchez never mentioned the possibility of not working to Mr. Johnson. He has a strong work ethic, a large family, and his spouse is not employed outside of the home. Mr. Sanchez is the primary breadwinner and is a very responsible individual. In addition to his regular employment, Mr. Sanchez is employed as a pastor for a small church. If a salary is provided, it is minimal, though there are likely other benefits, such as housing. Mr. Johnson had no contact with Mr. Sanchez's family, however, he is aware that the family lives modestly. Economic pressure to work may be a big factor in Mr. Sanchez's life.

Contact focused primarily on obtaining adaptive equipment to allow Mr. Sanchez to complete his job duties and authorizing payment for eye surgery. Mr. Sanchez is very bright, articulate, easy-going, and dedicated to his job and his family.

Mr. Sanchez's vision is still decreasing. He is not using a cane and has not received any orientation and mobility training. At some point, this issue must be addressed. Mr. Sanchez is unwilling, likely for financial reasons, to enroll in the

orientation Center training program, which is 6 to 9 months. A field teacher can provide mobility skills at the job site, but it will not be comprehensive or intensive training.

Recommendations

Mr. Johnson recommended that other rehabilitation counselors assume people are going to keep their jobs and provide whatever is necessary to keep the person employed. Don't initiate conversation about quitting or retiring on a disability program; tell them instead that you want to help them keep their jobs. Mr. Johnson stated, "Counselors need to remember what they tell people at the first meeting because it may come back on them." Employers should take advantage of rehabilitation services to keep good workers on the job.

Employer Perspective

The employer, Mr. Sams, had never worked with a person with a visual impairment until working with Mr. Sanchez, though he does employ workers with other disabilities. Mr. Sanchez informed Mr. Sams at the initial interview that he had a visual impairment but Mr. Sams felt it was not a problem as long as Mr. Sanchez could do the work.

Job Site Modification/Job Restructuring

Mr. Sanchez uses a device to enlarge print on the computers, which has no impact on other employees. He also has a device to enlarge print on documents. He was provided with a larger desk to accommodate his equipment. Mr. Sanchez performs all other tasks without modification. His work is always done well, though his visual impairment likely slows him down.

Training/Retraining

No training has been provided on the job site. Mr. Sams has been active in his efforts to encourage Mr. Sanchez to learn Braille.

Recommendations

Mr. Sams recommended that other employers treat workers with disabilities just like they treat everyone else. Persons with disabilities should try to find an employer willing to give them a chance. Find an employer that will accept you for what you are and can offer. He stated, "Why work for someone you will continuously have problems with?"

Significant Other Perspective

Job Site Modification/Job Restructuring

The couple's 13-year-old daughter helps Mr. Sanchez organize things on his desk. This is helpful because Mr. Sanchez finds it frustrating when he can't find things and prefers not to ask his coworkers.

Employment Issues

Coworkers lack understanding of Mr. Sanchez's condition. Mr. Sanchez is tolerant of this and uses the Christian quality of forgiveness to assist him in working with them. Sometimes Mr. Sanchez gets impatient with the workers who do not do their jobs to the best of their ability. The other workers do not provide Mr. Sanchez the encouragement and respect he receives at home.

Rehabilitation Services

Ms. Sanchez has not met the rehabilitation counselor and does not remember Mr. Sanchez making many comments about their work together. She is aware that their contacts have been positive and the counselor has provided equipment, medical care, and encouragement to her spouse.

Family Issues

The family relies on their faith to help them deal with issues concerning Mr. Sanchez's loss of vision. His vision loss is regarded as a family issue. She states her family believes God will provide employment, an income, and financial resources to them. Because God is in charge of their lives, there will always be a way for Mr. Sanchez to support his family. Ms. Sanchez regards her spouse's vision loss as an opportunity God provided her to give Mr. Sanchez encouragement and support. She believes prayer is the best support she can provide her spouse. She also encourages him and does whatever she can to assist him. Their children are also helpful. Ms. Sanchez enjoys her role as homemaker. Ms. Sanchez is pleased her spouse is the provider.

Personal Issues

Mr. Sanchez is very intelligent. He "maps out things with his mind and he is capable of achieving almost anything." Ms. Sanchez is quite proud of him and his accomplishments. Mr. Sanchez is also eager to learn and tackle new tasks.

Recommendations

Mr. Sanchez said that if you are losing your vision, the process will bring out your good character. It will also bring your whole family closer together.

Survey Results

A review of the completed survey indicates that there is both agreement and disagreement among the respondents regarding which items influenced the subject's ability to retain employment. The employer had very different opinions from the rest of the respondents on three items. In regard to the importance of the rehabilitation process and the importance of the employer, the employer assigned a rating of 2, or "not important", whereas the other 3 respondents assigned a rating of 4, or "very important". The importance of the significant other garnered a rating of 5, or "critically important" by both the subject and the significant other; a 4, or "very important", by the rehabilitation counselor; and only a 3, or "somewhat important", by the employer.

In assessing the importance of retraining on job retention, both the employer and the rehabilitation counselor indicated it was "not important". However, the subject indicated it was "somewhat important" and the significant other stated that it was "very important". The importance of the rehabilitation process was rated as "not important" by both the subject and the employer; the significant other and the rehabilitation counselor both assigned a rating of 4, or "very important".

The respondents were in general agreement about the importance of the six remaining items. All believed that cooperation with organized labor was not important to job retention. The rehabilitation counselor assigned a rating of 3, or "somewhat important", to the importance of both a change in the job duties or job description and a change in the physical surroundings at the job; the other 3 respondents stated that both of these issues were "not important".

Transportation was rated as "somewhat important" by the significant other; the 3 remaining respondents said it was "not important". Coworker attitudes were rated as "very important" by the rehabilitation counselor but only "somewhat important" by the other 3 responding persons. Financial attitudes were rated as "very important" by the subject and the rehabilitation counselor and "somewhat important" by the significant other and the employer. The personal characteristics of the worker were regarded as "critically important" by the subject and "very important" by the other 3 respondents.

Table 5. Survey Results: Sanchez

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	4	4	2	4
Rehabilitation process	2	4	2	4
Significant other	5	5	3	4
Employer	4	4	2	4
Change in job duties or job description	2	2	2	3
Change in physical surroundings at job	2	2	2	3
Cooperation with organized labor	2	2	2	2
Retraining	3	4	2	2
Transportation	2	3	2	2
Financial issues	4	3	3	4
Coworker attitudes	3	3	3	4
Personal characteristics of worker	5	4	4	4

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Mr. Edwards

Worker Perspective

Mr. Edwards was employed for 6 years as an employment analyst for a state agency; while participating in this research project, he lost his job through a mandated reduction in workforce for budgetary reasons. He is married and has one child. His spouse is employed outside of the home.

Job Site Modification/Job Restructuring

The rehabilitation counselor facilitated placement with the employer. The employer was agreeable to hiring someone with a visual disability and was aware that job modifications might be necessary. When Mr. Edwards applied for the job as an employment analyst, the qualification requiring previous experience was waived. Mr. Edwards felt the employer needed to hire a person with a disability for quota purposes, could not find a person with experience, and was therefore willing to make an exception for him.

While working as an employment analyst, Mr. Edwards sustained an additional vision loss. Performing job tasks became more difficult because his primary duties included locating, reading, and organizing research, and reporting it for others. He was not fluent in Braille, but was able to use it to organize notes. A clerk/secretary was assigned the task of reading materials to Mr. Edwards until appropriate equipment was obtained. Staff continued to provide assistance with hand written documents, or materials otherwise inaccessible by scanner.

Mr. Edwards began using computer technology to access information and develop reports. He continued to have difficulty reading quantities of information due to the time involved, which negatively influenced his productivity. Additionally, he used an IBM compatible whereas coworkers used Apple computers, so programs were not transferrable. He was also unable to access the computer network, and additional time was required to duplicate information.

Training/Retraining

Mr. Edwards participated in a Braille course several years ago sponsored by rehabilitation services. The employer allowed Mr. Edwards to take 2 or 3 hours from each work week with pay for Braille instruction.

Transportation

Mr. Edwards accesses public transportation without difficulty. He can travel around the city independently at any time of day.

Motivation

The option of not working was never considered, though Mr. Edwards considered leaving his current job and beginning a career where his job duties could be performed more readily. He has not pursued these options since assuming the additional responsibilities of having a spouse and a child. After learning he would be laid off, Mr. Edwards has given more thought to other types of employment.

Mr. Edwards credits his upbringing with his tenacity in maintaining employment. He belonged to a military family where constant moves around the world were routine. No one sheltered him from real life experiences. He always felt a part of mainstream life and that his visual impairment was an inconvenience to be overcome. His parents encouraged him to take risks and explore his capabilities. His parents ignored it when others tried to impose limitations on him. Mr. Edwards was always held to the same standards as his sighted peers.

Mr. Edwards experienced no consistency in the type of rehabilitation or educational services available to him; he adjusted to whatever was provided. He attended public schools and never questioned competition with sighted peers. In college, his teachers were agreeable to assisting him in identifying adaptive methods to complete course requirements.

Mr. Edwards does not sit back and wait for things to be offered to him; he goes out and finds what is available and if it will assist him. He is his own advocate but was always confident that the rehabilitation counselor would assist him.

Rehabilitation Services

Mr. Edwards has worked with rehabilitation services since he was a teenager. Until recently, he had the same rehabilitation counselor; he misses her and the rapport they developed throughout the years. The counselor assisted him in securing his job, then began working with him again when his deteriorating vision caused him to move from large print to a voice synthesizer and a scanner to access print materials. Upon being laid off from his current position, Mr. Edwards plans to utilize rehabilitation services again.

Rehabilitation services purchased a computer with large print access for Mr. Edwards when he was previously employed with the federal government. He went to the local rehabilitation center at that time to learn computer skills. As his vision deteriorated, he needed a more modern computer with voice access.

The rehabilitation counselor met with Mr. Edwards and the employer to discuss technology needs. A rehabilitation technologist made equipment available for Mr. Edwards to try and provided information regarding what had been successful for others. Mr. Edwards was given the freedom to select the equipment that would be most helpful to him. He chose stand alone systems rather than an integrated unit. One year elapsed from the time he began comparing and examining various computer systems and the

time the computer was on his desk.

Employer Issues

The employer was generally regarded as supportive and eager to see Mr. Edwards succeed on the job. By providing a means for him to do the job easily and efficiently, the productivity of the unit was enhanced. The employing agency advocated hiring persons with disabilities and appeared to have more resources to pay for adaptive equipment than a private employer.

After placement, the employer noticed Mr. Edwards having increasing difficulty completing assignments. The supervisor asked him what his plan was for dealing with these issues and what equipment was needed to assist him in completing his duties. The employer was involved in every step of the decision-making process, such as what equipment would be purchased, suggestions regarding what would be helpful, and was aware of what could be expected. The employer paid for some equipment.

The employer encouraged Mr. Edwards to learn Braille, and provided paid time off from work for Braille instruction. The employer expected Mr. Edwards to meet deadlines for completing work assignments, though his workload was decreased. It took him longer to complete assignments when learning to use new equipment.

Coworker Issues

Coworkers read short or hand written documents, such as telephone messages, to Mr. Edwards and assisted him in skimming longer documents. Mr. Edwards tried not to use coworkers for reading assistance for an extended period because they had to postpone their own work to assist him. Clerks provided assistance with proofreading documents Mr. Edwards generated. Support staff were always agreeable to assisting Mr. Edwards.

Personal Issues

Mr. Edwards is still attempting to adjust to his loss of vision. He finds it difficult and frustrating to perform simple tasks, both at work and at home. Throughout his employment, he felt as if he were constantly trying to catch up, constantly trying to be more efficient, and always failing at both. Without access to print, it was difficult for Mr. Edwards to find methods to perform job tasks with accuracy and speed.

Mr. Edwards asks for and receives help when he needs it, though he hates asking for assistance. He prefers to complete job tasks independently, utilizing a computer system rather than another person. Though he strives not to rely on others for basic things, it is a bargaining process (i.e., determining if the extra time expended is worth the independence).

Learning Braille was also a significant help to Mr. Edwards in his efforts to adjust to his reduced vision. He uses it primarily for making notes to use away from his workstation, or when a computer is otherwise unavailable.

Mr. Edwards purchased a laptop computer for personal use. It is compatible with his work computer and he uses it for note-taking during meetings, etc. at the job site.

Upon being laid off, Mr. Edwards immediately began seeking another position. He plans to contact the local Job Service office for job leads; he does not plan to contact VR services for assistance with job-seeking, though he will make that contact if he locates a job which requires assistive equipment. Mr. Edwards is considering a career change and prefers a home-based business. He is interested in sales, personal finance, financial counseling, and brokerage.

Family Issues

Family members have been an important influence in Mr. Edwards' job retention. His parents provided financial support in the past and assisted him in purchasing adaptive equipment. Mr. Edwards has a younger sister with the same visual condition and the two face similar issues overcoming barriers. His sister provided ongoing support as well as motivating Mr. Edwards to achieve.

Future Plans

Mr. Edwards would like to pursue employment in a sales or management position. He has not had the opportunity to engage in either direct sales or in professional supervision but feels both would be interesting and a challenge. He hopes to learn more about both of these fields in the next few months, as well as improving his computer skills by becoming familiar with internet capabilities. He would like a job he could feel passionate about, rather than a job he performs to meet financial obligations.

Performing work that has a positive impact on the lives of others is important to Mr. Edwards. Until he is able to do that, he is considering various home-business possibilities, including working as a medical transcriptionist. Although that position would not be his ideal job, it would allow him to be independently employed.

Mr. Edwards regards his recent layoff as an opportunity to explore other career options. He anticipates becoming involved in a more personally rewarding business. During this period, his family will rely on savings, his spouse's salary, and unemployment benefits; he estimates the family has enough financial resources to last 1 year.

Rehabilitation Counselor Perspective

Ms. Koki has been Mr. Edwards' rehabilitation counselor for a number of years. Mr. Edwards had fairly good functional vision when services were initiated, but due to retinitis pigmentosa, his vision gradually decreased. While employed in his most recent position, his vision significantly deteriorated.

Job Site Modification/Job Restructuring

The employer purchased a speech synthesizer for Mr. Edwards to use on the job. Mr. Edwards purchased his own laptop computer for note-taking purposes as print was becoming increasingly difficult to read. The computer Mr. Edwards used on his previous job was transferred to the new job site, where he used large print, Braille, and an Arkanstone scanner/reader.

Training/Retraining

Mr. Edwards used a CCTV and books on tape while in high school. He was gradually introduced to technology, including access to large print and audio reproduction. He received training in orientation and mobility, including traveling by bus, as his vision decreased. After becoming employed in his most recent job, Mr. Edwards began to learn Braille due to his increasing vision loss.

Employer Issues

Ms. Koki closed Mr. Edwards' rehabilitation file when he was employed part-time with a city agency. The rehabilitation agency placement person identified a full-time position with a state agency and worked with Mr. Edwards and the employer to facilitate placement. The supervisor was supportive and agreeable to working with Mr. Edwards. Mr. Edwards was honest and open with the employer about his abilities. As Mr. Edwards' vision decreased, the employer was concerned about his ability to keep his work and notes organized. The employer allowed Mr. Edwards to use working hours to learn Braille at the rehabilitation center.

Personal Issues

Ms. Koki reported that Mr. Edwards is intelligent and has a warm and pleasant personality. He coped well with his loss of vision. His spouse and parents are loving and supportive. Ms. Koki served as a role model for Mr. Edwards, as she is also visually impaired.

Mr. Edwards was willing to invest his own money in assistive equipment, which demonstrated to the employer his motivation and desire to be self-sufficient. He was eager to obtain an apartment, so finances also motivated him to be productively employed.

Recommendations

Ms. Koki recommended that rehabilitation counselors be supportive of their clients and provide them with information and resources they can use and allow them to acquire the skills they need. Let the client be in charge of what happens and let them know that professional counseling services are available if they so choose.

Employer Perspective

The supervisor, Ms. Light, initiated contact with the rehabilitation counselor for assistance in filling a competitive position within her agency. Although she had never worked with someone with a visual disability before, Ms. Light was agreeable to working with Mr. Edwards and rehabilitation services to facilitate the placement. The employer's office is directly across from the Council for the Disabled, which sensitized the employer to the employment efforts of persons with disabilities. Additionally, the state is experiencing a labor shortage and recruitment of persons with disabilities was regarded as one method of accessing an underdeveloped source of labor.

Job Site Modification/Job Restructuring

The requirements for the job were modified to allow Mr. Edwards to apply for the position; he was not required to have completed two statistics courses in college. For this reason, Mr. Edwards found it difficult to complete statistical work and a coworker completed these duties for him.

Mr. Edwards used a clerk for a reader before learning Braille and obtaining a scanner. He did his best work when a clerk read and organized his work, but the agency was financially unable to provide that assistance on a permanent basis. After obtaining his adaptive equipment, Mr. Edwards was still unable to perform at the expected rate of productivity. The supervisor completed work Mr. Edwards was unable to complete, thus overburdening her workload. Ms. Light elected to do this because she was responsible for the productivity of the unit. Although Mr. Edwards' job duties were modified while he was learning to use adaptive equipment, he did not produce at an acceptable level.

The employer purchased the voice synthesizer for Mr. Edwards and donated it to the rehabilitation agency. The agency then gave the device to Mr. Edwards.

Training/Retraining

A job qualification requiring completion of two statistics courses was waived for Mr. Edwards. He agreed to complete the statistics training at his local college but never pursued it. According to the supervisor, the courses are a job requirement but statistics are not utilized on the job to a great extent. Mr. Edwards received some on-the-job training in conducting research and in writing skills.

Ms. Light insisted that Mr. Edwards learn to read Braille and provided time off from work for this purpose. He was also allowed to use work hours to learn to use his new equipment.

Coworker Issues

The employer stated that although some staff were critical of Mr. Edwards because he was not producing at the expected

level, this was not regarded as a major problem. Other staff members not producing at the expected productivity level did not experience the same criticism.

Rehabilitation Services

Ms. Light contacted rehabilitation services as part of a competitive recruitment process for filling an existing vacancy. Although she knew a worker with a visual disability might need adaptive equipment, she did not anticipate being involved in the selection or purchase of equipment; she expected the rehabilitation counselor and Mr. Edwards to handle these issues, which they did. Contact with the rehabilitation counselor was frequent at the time of placement, then reduced after Mr. Edwards became accustomed to the job. The rehabilitation counselor gave Mr. Edwards advice about how to use cues at work, how to keep his work organized, and how to keep his schedule.

Personal Issues

According to the employer, Mr. Edwards took this job because it was the only position available to him; he was not genuinely interested in the work. The work, which was primarily research, was frustrating for him to complete because he was unable to read regular print. This frustration and lack of interest negatively impacted his productivity. He was, however, very independent, intelligent, a good public speaker, and functioned well as an agency representative. If the job had been more interesting to Mr. Edwards, if he had completed the statistics courses, and if he had better time management skills, he would have functioned more productively and been eligible for advancement.

Braille had not been taught to Mr. Edwards previously because he had residual vision. He had to learn Braille after losing additional vision and while trying to maintain a job. He would have benefitted from Braille training prior to job placement.

Recommendations

The employer advised others with vision impairments seeking a job to make sure they are interested in the job they accept.

Significant Other Perspective

Mr. Edwards' significant other is his sister, Ms. Malone. She also has retinitis pigmentosa and is legally blind.

Job Site Modification/Job Restructuring

According to Ms. Malone, the use of a voice synthesizer was most helpful to Mr. Edwards in maintaining his ability to perform his job as his vision decreased. Ms. Malone stated, "No question about it, without the technology, he wouldn't have been able to

stay employed."

Coworker Issues

Ms. Malone met her brother at his office on several occasions and had the opportunity to become friendly with the secretaries and supervisor. She believed Mr. Edwards was hired based on his qualifications and his dependability. Once employed, the supervisor recognized his intelligence and his abilities. When Mr. Edwards sustained additional loss of vision, the employer recognized he was a valuable resource and agreed to work with him through the adjustment period. The supervisor treated Mr. Edwards the same as other employees; she was supportive and gave him flexibility with his work schedule.

Coworkers were initially wary about Mr. Edwards' ability to perform the job because they were unfamiliar with the adaptive equipment available. Additionally, Mr. Edwards is not outgoing, so it took him longer to become comfortable within the group than it might have taken a more gregarious person. Once he became comfortable in the job and the coworkers got to know him a little better, their relationship was friendly and helpful.

Rehabilitation Services

The rehabilitation counselor working with Mr. Edwards also worked with Ms. Malone. The counselor gave Mr. Edwards the responsibility of choosing the equipment most suitable to his job tasks. She made Braille training available to him when he decided it would be helpful. The counselor functioned very much as a partner. Mr. Edwards was required to invest his own time and money in the selection and purchase of equipment, and the counselor provided information and financial assistance. The attitude of the counselor was to help you help yourself, not do things for you.

The rehabilitation counselor arranged for someone to go to the job site with Mr. Edwards the first few weeks to assist in training and orientation. This allowed Mr. Edwards to become familiar with the work environment more quickly and assisted him in developing a system with his coworkers.

Family Issues

Ms. Malone and her brother were raised by immigrant parents who came to the United States with nothing and worked their way to a middle-class lifestyle without utilizing public assistance programs. The parents inculcated a strong Judeo-Christian work ethic in the children, who were told that if they worked hard, they could succeed. They were expected to do well in school, to have families, and to be productive members of society.

When the children were born with visual impairments, the parents decided to rear them as any other child, to enroll them in mainstream educational programs, and to stress alternative methods of completing tasks. Both were encouraged to function in the sighted world.

Additionally, Mr. Edwards and his sister took the attitude that although they had to perform tasks differently from sighted persons, they were able to do most activities. Blindness was not used as an excuse, but as "an obstacle that needed to be gone around, but you were fully expected to go around it." They learned in childhood that creativity in problem-solving was expected and this lesson has helped them both overcome obstacles as adults.

Being a few years younger than her brother, Ms. Malone believes Mr. Edwards felt a sense of responsibility toward her, and a responsibility to prove that things could be done, both for his sake as well as hers. The two were very close. They enjoyed a natural and positive sibling rivalry and Mr. Edwards functioned as a role model for his sister.

Personal Issues

Mr. Edwards gradually adapted to his decreasing vision. As he grew older, he learned more sophisticated coping skills and was able to compensate. Finally, his vision loss became much worse and he was unable to use many of the techniques that had served him effectively in the past. He was faced with learning new adaptive skills.

The emotional stress of losing his vision, particularly with his increased responsibilities subsequent to having a family, was considerable. Reliance on visual memory became more important. The vision loss required more use and dependency on equipment rather than personal creativity. This was frustrating as Mr. Edwards had been very ingenious about developing his own methods to overcome barriers.

Mr. Edwards experienced considerable stress trying to complete his job duties while adjusting to his vision loss and learning new skills. One major stressor was determining which equipment was appropriate. Being trained in political science, Mr. Edwards was unfamiliar with different aspects of technology. Although rehabilitation services provided some assistance, Mr. Edwards purchased some equipment himself. He had considerable input regarding which equipment was purchased for him by the employer and the rehabilitation counselor.

The most important thing Ms. Malone did for her brother throughout his loss of vision and subsequent adjustment at work was demonstrating empathy for his feelings. She listened and provided support to him. Together, they brainstormed and

The most important thing Ms. Malone did for her brother throughout his loss of vision and subsequent adjustment at work was demonstrating empathy for his feelings.

developed ideas to resolve problems. Because they have the same condition, Ms. Malone was able to understand her brother's concerns and could speculate about how she would resolve the problem if in a similar situation.

Recommendations

Ms. Malone recommended that others remember that all people who are blind are individuals and even those with the same visual condition use different methods to accomplish tasks. Some people are more verbal, others are more introspective. What works for some is not necessarily going to work for others.

When you work with someone who is blind, it is helpful if you remember to put things in the same place all the time. Don't put phone messages on the desk, put them in a specific spot. Cooperate with the systems the worker develops.

When someone who is blind begins to tell you about a problem or situation they are facing, be sure and listen to the person explain their experience and their perspective. Then, ask the person how they would like to be helped. Do not presume the person wants the help that you want to give; they may want something else and you will just make them feel exasperated. Do not try to take control of the situation. Let the person give you advice on how you can help them. But do be willing to help.

Survey Results

Results of the survey indicated that the respondents agreed on the importance of some items to successful job retention but disagreed on more items. For example, the only item where all respondents were in total agreement was in regard to the impact of cooperation with organized labor; all respondents agreed this issue was "not important". All respondents agreed that the role of the rehabilitation counselor was "critically important" or "very important". Although the employer did not respond to the item concerning the importance of the rehabilitation process, the other 3 respondents agreed it was either "very important" or "somewhat important".

The employer stated that retraining was "very important" to job retention; the other 3 respondents stated that retraining was "not important". The employer indicated that transportation was "critically important" but the other 3 respondents again said it was "not important". And in rating the importance of the personal characteristics of the worker, the employer assigned a rating of 3, or "somewhat important" whereas the other 3 respondents assigned a rating of "critically important".

A change in the physical surrounding at the job site was rated as "somewhat important" by the rehabilitation counselor, although the other 3 respondents assigned a rating of 5, or "critically important". The employer stated that a change in the job duties or job description was "critically important" whereas

the rehabilitation counselor indicated that such a change was "somewhat important"; the subject and significant other both said the change was "not important".

Financial issues were rated as "very important" and "critically important" by the subject, the employer, and the rehabilitation counselor; the significant other stated that financial issues "hindered" the subject's job retention. The significant other and the subject agreed that coworker attitudes and the role of the significant other were "somewhat important" to job retention; the employer indicated that coworker attitudes and the significant other were "not important" and the rehabilitation counselor stated they were "very important". In regard to the importance of the employer in job retention, the subject and the employer assigned a rating of "somewhat important"; the significant other stated the role of the employer was "very important" and the rehabilitation counselor said it was "critically important".

Table 6. Survey Results: Edwards

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	4	5	5	5
Rehabilitation process	3	4	0	4
Significant other	3	3	2	4
Employer	3	4	3	5
Change in job duties or job description	2	2	5	3
Change in physical surroundings at job	5	5	5	3
Cooperation with organized labor	2	2	2	2
Retraining	2	2	4	2
Transportation	2	2	5	2
Financial issues	4	1	4	5
Coworker attitudes	3	3	2	4
Personal characteristics of worker	5	5	3	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Mr. Smith

Worker Perspective

Mr. Smith has been employed approximately 1 year as a customer service representative with a bank card service in a large city in the southeastern United States. His primary job responsibility is answering questions from customers by telephone. Mr. Smith obtained this job after the company he previously worked for relocated and he opted not to transfer. He has previous successful employment in the Business Enterprise Program. He lives alone.

Job Site Modification/Job Restructuring

All customer service representatives use computers to access customer accounts and provide information. Mr. Smith uses a scanner to access printed documents and voice synthesis to access information from the computer screen. Before the scanner was obtained, the employer provided a reader. The employer provided velcro for the telephone so Mr. Smith could attach it to his equipment.

Each customer service representative is located in a cubicle. Mr. Smith's cubicle is open and has a little more space to accommodate his adaptive equipment.

Training/Retraining

Upon exiting high school, Mr. Smith received a certificate, rather than a diploma; he later attended a rehabilitation center to earn his GED and receive training in Braille, typing, mobility, and personal management. After receiving his GED, Mr. Smith successfully completed a 3-month computer training program and became employed as a dispatcher. When the company relocated, Mr. Smith was unemployed for almost 1 year before returning to work.

During his period of unemployment, Mr. Smith contacted his rehabilitation counselor, who arranged for him to receive training at two rehabilitation centers. Additional training focused on assistive devices and job-seeking skills.

As part of the termination package from the relocating company, Mr. Smith had access to employment agency services. The agency assisted in resume development and interviewing skills and provided job leads. The person providing interviewing skills training was very directive and provided specific feedback regarding how Mr. Smith could improve his professional appearance; this was very helpful to Mr. Smith. The trainer convinced Mr. Smith to shave his beard while looking for a job.

The rehabilitation counselor arranged for orientation and mobility training at the job site and between the job site and Mr. Smith's home after Mr. Smith secured a job.

When the coworkers encounter problems with their computers, Mr. Smith is the person in their area who provides training and

assistance.

Transportation

Mr. Smith chose to live in an apartment convenient to public transportation. He takes two buses and a train each way to work every day. Orientation and mobility instruction provided him with the skills necessary to make this trip.

Motivation

Although Mr. Smith always had the option of returning home to live with his mother, he was determined to work and live independently. He feels "a drive" that motivates him to work. He did not want to "sit around the house all the time," so he continued to look for work. Mr. Smith stated, "I don't want to get my mind in the habit of being at rest. I need to keep it going 'cause I'm not getting any younger."

Finances contributed to Mr. Smith's decision to continue working. He never considered the possibility of not working. He chooses to earn his own money so he can feel independent and not be on a fixed income. He believes persons who are blind and do not work make all persons who are blind appear as if they do not want to work.

Mr. Smith's background influenced his decision to retain employment. He grew up on a farm and has a brother, also legally blind, who has worked in sheltered employment for 34 years. His parents expected him to participate in farm chores. Mr. Smith stated, "My dad would make me work just as hard as he did the other farm workers. I had to get up and haul hay, fix fences, feed the cows, and all that stuff."

Hard work is valued by Mr. Smith. He quoted his father saying, "When you go to work, give a man a good 8 hours a day. If you can't do it, don't even go." He believes he can motivate others by sharing his story and providing support.

Friends provide a strong support network to Mr. Smith by assisting with transportation, purchasing clothing, and helping him look for a job. His friends treat him the same way they treat their sighted friends.

Rehabilitation Services

The rehabilitation counselor arranged for training at two rehabilitation centers when Mr. Smith was between jobs. Mr. Smith worked closely with the placement officer at one of the centers, who provided transportation and assistance completing employment applications. The rehabilitation counselor arranged for Mr. Smith to receive orientation and mobility training to navigate the route to and from work and at the job site. When Mr. Smith needs to learn routes to new areas, he contacts the counselor, who arranges additional instruction.

The most important thing the rehabilitation counselor did

was be there for Mr. Smith. He always felt he had someone supporting him and providing assistance. Even in issues not involving his employment, he felt he could approach the rehabilitation counselor as a friend. When equipment was needed, the counselor acquired it within 2 weeks.

Employer Issues

The employer had several other persons who are blind or visually impaired working as customer service representatives when Mr. Smith joined the company. Currently, there are approximately seven employees with visual disabilities at the job site. Mr. Smith attributes this to the company and the supervisor, who are open-minded and willing to give people with disabilities a chance to work. Persons with hearing impairments and orthopaedic disabilities are also employed by the company.

When employees with visual disabilities need assistance, they contact the supervisor, who provides it, if possible. The employees with visual disabilities meet with the supervisor monthly to discuss issues, concerns, or problems.

Computer engineers provided Mr. Smith training and he now serves as the link between the customer service representatives and the computer engineering department. Mr. Smith provides information and serves as an on-site assistant to the computer engineers for computers in his area. Mr. Smith regards this as a promotion.

Mr. Smith observed that sighted employees have been promoted before persons with visual impairments with more time on the job. The manager position, which would be the next promotional position, requires extensive paperwork that is not yet computerized. Until that paperwork is accessible by computer, or unless a volunteer reader was available, Mr. Smith doubts he would be seriously considered for promotion. Customer service representatives are offered incentives for productivity.

Mr. Smith is appreciative to his employer for the opportunity to work. He believes if other companies gave persons with visual impairments a chance, similar positive results would occur.

Coworker Issues

Some coworkers appear uncomfortable with workers who are visually impaired. Sighted coworkers become embarrassed after making references to vision or giving visual directions such as, "it's over there". Mr. Smith uses humor to put coworkers at ease during these situations. He believes coworkers have accepted him as a peer.

Several employees with visual impairments use dog guides. Some sighted coworkers are fearful of the dogs, and avoid those using them. Workers with visual impairments have their own table in the cafeteria, which is easily located, and occasionally sighted coworkers join them.

Mr. Smith provides training in assistive technology to

sighted coworkers. Coworkers typically sit with him for an hour or so and observe his activities and skills. Coworkers are impressed with the equipment and his abilities.

Personal Issues

Mr. Smith describes himself as a "country boy, laid back, easy going, hard person to make mad, just get along with everybody if everybody lets me get along with them" person. He always speaks to others and is friendly at the workplace. Mr. Smith is highly motivated. When unemployed, he took the initiative and independently pursued job leads.

A good friend, who is also a fellow deacon at church, provides Mr. Smith with support or advice and served as a father figure to him.

Recommendations

Mr. Smith recommended that if you lose your vision, you must be willing to learn new things. Do whatever you can to make yourself more marketable to employers, which includes learning new skills. Once employed, if you want to move ahead and get promotions, continue to learn new things and improve yourself. Mr. Smith stated, "Being a blind person, I try to prove myself over and over. Not only to them, but to myself. Showing myself that I can do the job." He believes in finding quicker ways of working so that he can do the job faster.

Employers considering hiring a person who is blind should be open-minded about what a person can do. Give the person with a disability a chance to show you what can be done with the technology now available.

Rehabilitation professionals should contact persons with visual impairments when they are younger and provide them career

"Being a blind person, I try to prove myself over and over. Not only to them, but to myself. Showing myself that I can do the job."

information. Most people have no idea what possibilities are out there for them, or find out about the possibilities much later than they should. Mr. Smith stated, "There is a lot of technology out there now...if a lot of people knew about it, maybe they wouldn't sit around and draw Social Security checks." He added that it helps, however, if the job pays well and has medical insurance and retirement benefits.

Future Plans

Mr. Smith hopes to be promoted to a managerial position within a few years. He anticipates participating in computer training to learn Windows as quickly as possible. The employer will teach Mr. Smith how to use this program, then he will assist in training other employees with visual disabilities.

Rehabilitation Counselor Perspective

The rehabilitation counselor, Ms. Sale, has worked with Mr. Smith for approximately 6 years. Their contact started when she began teaching Mr. Smith to read Braille. Ms. Sale later became a rehabilitation counselor and Mr. Smith was on her caseload. She assisted Mr. Smith in accessing services from two rehabilitation centers and a private company providing computer and customer service representative training. After he finished these programs, an employment specialist provided Mr. Smith assistance in locating job leads and submitting applications.

Mr. Smith participated in an evaluation to determine what computer equipment he could use. After securing employment, the rehabilitation engineer visited the job site and determined what additional equipment was needed to assist Mr. Smith in performing his job duties; that equipment was also obtained. It usually takes a couple of weeks to obtain equipment after the rehabilitation engineer makes the recommendation.

Job Site Modification/Job Restructuring

In order to perform his job duties, Mr. Smith needed a cassette recorder, a voice synthesizer and software for voice access, a scanner, and a headset, in addition to a computer. Several speech programs were ordered and tried out before Mr. Smith selected one he felt comfortable using. The rehabilitation counselor authorized the purchase of adaptive equipment and the employer provided the basic computer system supplied for other employees.

With his adaptive equipment, Mr. Smith performs all customer service representative duties without restructuring of duties.

Training/Retraining

Mr. Smith received training in academics, homemaking, and independent living skills, including obtaining his GED, at one rehabilitation center, then moved to another rehabilitation center for training in computer technology. He learned to use adaptive equipment at the rehabilitation facility, but the equipment was not provided until Mr. Smith secured employment. After completing training at the rehabilitation centers, Mr. Smith successfully completed 9 months of commercial computer and customer service skills training.

When he began work as a customer service representative, orientation and mobility training was provided at the job site

and on the route between his work and home; this training was provided directly from the rehabilitation center. No additional training was provided by the rehabilitation counselor, though some on-the-job training was provided by the employer.

Transportation

Mr. Smith has a long commute to and from work. Ms. Sale suggested use of a van service as an alternative to public transportation.

Employer Issues

Ms. Sale spent a great deal of time talking with the employer before Mr. Smith began working. She and the employer discussed computers being used at the job site and adaptations required. Ms. Sale visited the job site on two or three occasions to deliver equipment or to see how Mr. Smith was doing on the job.

The employer was impressed with Mr. Smith, who presents himself well and was very qualified for the job. He works for a large company and larger companies appear to be more enlightened and have more experience than smaller companies about hiring persons with disabilities.

Coworker Issues

Coworkers did not appear to have concerns about Mr. Smith's ability to perform the job. When Mr. Smith started the job, he received a great deal of help from the other workers. He is easy going and has a pleasing personality; these traits probably helped him get along with the coworkers.

Personal Issues

At one time, Mr. Smith lived in a very rural area. He was employed as a BEP operator for many years and eventually grew tired of the work. He is very intelligent and capable and realized that he didn't want to stay at home. Mr. Smith was aware that job prospects are limited in rural areas and elected to relocate to a more dynamic labor market.

Mr. Smith always took the initiative to do things for himself. He worked hard at improving his grammar to be more marketable as a customer service representative. He was very active in the development of his IWRP.

Mr. Smith comes from a family with a strong work ethic. He has a brother and sister who have disabilities, and his father died at a young age. The family members did not sit around and wait for the government to help them.

Recommendations

The rehabilitation counselor recommended that when a person is unemployed, keep the person active. Maintaining computer skills and providing job leads, as well as having ongoing contact

with the person during the period of unemployment, are very important. Use the period of unemployment to help the person improve personal and vocational skills. This keeps the person active and prevents depression.

The major reason so many people with visual impairments do not work is the transportation issue. It is a terrible problem, especially in rural areas. When interviewing someone, Ms. Sale asks, "If I found you a job today, could you get there?" When the answer is no, she knows there is a problem.

Find jobs for persons that include health benefits. If a person sacrifices health care benefits for a job, the job must either pay enough for them to purchase health insurance or the employer must provide it.

Employer Perspective

Mr. Smith's supervisor, Ms. Axle, has been working with him for approximately 1 year. When Ms. Axle began working in the customer service department, there was one person with a visual impairment who later became totally blind. Ms. Axle was therefore familiar with adaptive equipment available for persons with visual impairments. When Mr. Smith started his job, there were three other persons with visual impairments already employed; there are currently seven persons with visual impairments in the department. The manager in the department worked with the rehabilitation center to find appropriate employees with visual impairments.

The employer typically requires new employees to enter the job with 1 year of previous work experience as a customer service representative. Mr. Smith had this experience.

During the past 4 months, the employer has implemented an incentive program ranking employees according to adherence to the schedule, amount of sick and emergency leave time used, and availability. All persons with visual impairments have been at the top of the list in the incentive program for the entire 4 months.

Job Site Modification/Job Restructuring

When he started his job, Mr. Smith provided his own computer and adaptive equipment.

When interviewing someone, Ms. Sale asks, "If I found you a job today, could you get there?" When the answer is no, she knows there is a problem.

Workers with visual impairments are given higher security

access than sighted employees. Higher security access enables persons to move through the computer system and make changes using the computer, whereas sighted employees write these same changes on paper. With this small exception, all customer service representatives perform the same duties in the same way.

Training/Retraining

During his first 6 weeks of employment, Mr. Smith participated in an on-the-job training program.

Rehabilitation Services

The only contact Ms. Axle had with the rehabilitation counselor occurred when Mr. Smith began his employment. The counselor visited the job site to determine what equipment Mr. Smith needed to perform his job, and later to determine whether the equipment was adequate. Most contact was between Mr. Smith and the rehabilitation counselor, without Ms. Axle's involvement. Ms. Axle felt the rehabilitation counselor was very helpful.

Coworker Issues

Ms. Axle is currently coordinating a sensitivity training program for sighted workers. This program is designed to give sighted employees an idea of how persons with visual impairments complete their jobs and other tasks of daily living. The training was suggested by employees who are visually impaired. Sighted workers have been receptive to this training experience.

Personal Issues

Mr. Smith is reliable, very caring, and very professional on the job. He performs his duties quickly and maneuvers well through the computer system, which is important because the employer serves approximately 15,000 calls per day.

Advancement

Employees are promoted from the Customer Service I position through the Customer Service III position. Currently, none of the customer service representatives with visual impairments have been promoted beyond the Customer Service III position. Promotions beyond that rank would place the person in a supervisory capacity. Ms. Axle felt it would be a management decision regarding whether a person with a visual impairment would be promoted into a supervisory position.

Recommendations

The employer advised that if you have the opportunity to hire a person with a visual impairment, do it; give the person a chance to work. If you have a visual impairment and are looking for a job, apply for a job for which you are qualified.

Significant Other Perspective

Mr. Well has known Mr. Smith for 15 or 20 years. They are very close friends.

Employment

Mr. Well has not had contact with the employer. Mr. Smith has always made positive comments about the employer and his coworkers to Mr. Well. Mr. Smith is very good at breaking the ice with coworkers. He strives to show sighted coworkers they can communicate in an easy and friendly fashion.

Family Issues

Mr. Smith's family lives in a rural area. His mother did not treat him differently when she learned he had a visual impairment. He was expected to contribute to society. Those values continue to influence Mr. Smith today. His brother is the same way. Both would do any kind of work they were asked to do, and both enjoy life.

Personal Issues

Mr. Smith has a strong desire to work, be productive, and contribute to society. He has a wholesome desire to earn his way and make money. He enjoys helping others and has talents as a problem-solver. Mr. Smith works hard at making sighted persons comfortable with him and his disability.

During his period of unemployment, Mr. Smith never gave up hope. He was always optimistic that a job would become available. He contacted previous employers for potential job leads.

Mr. Well, and others in his church who know Mr. Smith, strive to be a positive support system. Mr. Well cares a great deal about Mr. Smith and tries to provide reassurance and help.

Rehabilitation Services

Mr. Smith has expressed deep appreciation for the work the rehabilitation counselor has done on his behalf. Rehabilitation services represented a safety net to Mr. Smith; he knew he could always return to his counselor and receive additional services when needed. The rehabilitation counselor helped him find the customer service training program, and the specialist from the rehabilitation center helped him find his job.

Recommendations

Mr. Well stated that everyone needs someone else to help them realize they are valuable and have a responsibility to contribute to the world and make it a better place. Everyone must accept their own limitations. We need to encourage each other to contribute to society.

If you are an employer, expect the person with a disability to perform at the same level as those without disabilities;

however, make it possible for the employees with disabilities to perform their job duties by providing the equipment or training necessary. Some limitations must be accepted. Persons with disabilities must let their employers know what they need. The employee needs to try to solve problems independently. If you have a visual impairment, you need to have good communication with your employer.

If you are the significant other to a person with a visual disability, treat the person as you do your other friends. Be available. Make sure the person has a wholesome relationship and open communication with you and others. Let the person be wrong and make their own mistakes.

Survey Results

The respondents agreed on the importance of some items to successful job retention, but they disagreed on the importance of several items. For example, in regard to the importance of the rehabilitation counselor and the employer, Mr. Smith assigned a rating of "critically important" and the remaining 3 respondents assigned a rating of "very important". All 4 respondents agreed that cooperation with organized labor was "not important". In assessing the importance of the rehabilitation process and transportation, Mr. Smith and the significant other both stated they were "critically important" and the employer and rehabilitation counselor indicated these items were "somewhat important".

Areas of disagreement included assessment of the role of the significant other, with Mr. Smith and the employer assigning a rating of "very important", the significant other assigning a rating of "somewhat important", and the rehabilitation counselor assigning a rating of "not important". The rehabilitation counselor also assigned a rating of "not important" to the retraining item. This contrasts with Mr. Smith, who rated it as "critically important", the significant other, who rated it as "very important", and the employer, who rated it as "somewhat important". The rehabilitation counselor rated the importance of a change in the job duties or job description as "not important", whereas the significant other and the employer rated it as "somewhat important" and Mr. Smith rated it as "very important".

In regard to the importance of financial issues on the subject's job retention, Mr. Smith assigned a rating of 4, or "very important"; both the significant other and the rehabilitation counselor assigned a rating of 3, or "somewhat important", and the employer indicated it was "not important". The employer assigned a rating of "very important" to a change in the physical surroundings at the job; Mr. Smith and the significant other both stated that this was "somewhat important" and the rehabilitation counselor indicated it was "not important".

The significant other rated the importance of coworker

attitudes as "not important" but the employer and the rehabilitation counselor indicated they were "somewhat important" and Mr. Smith stated they were "very important". Finally, in regard to the personal characteristics of the worker, Mr. Smith and the rehabilitation counselor both assigned a rating of 5, or "critically important", the employer assigned a rating of "very important", and the significant other rated it a 2, or "not important".

Table 7. Survey Results: Smith

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	5	4	4	4
Rehabilitation process	5	5	4	4
Significant other	4	3	4	2
Employer	5	4	4	4
Change in job duties or job description	4	3	3	2
Change in physical surroundings at job	3	3	4	2
Cooperation with organized labor	2	2	2	2
Retraining	5	4	3	2
Transportation	5	5	4	4
Financial issues	4	3	2	3
Coworker attitudes	4	2	3	3
Personal characteristics of worker	5	2	4	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Ms. West

Worker Perspective

Ms. West recently became a supervisor for a state agency providing rehabilitation services to persons who are blind. She has previous job experience with another state agency. She has been married 26 years and lives with her spouse in a southeastern city.

Job Site Modification/Job Restructuring

When Ms. West initially began employment at a state agency, she completed all job duties using Braille rather than print. Assistive equipment, such as a computer with voice synthesis, was later purchased by the employer. When she changed jobs, Ms. West took the equipment with her and the new employer purchased a scanner to access print documents. The scanner has not worked correctly, but Ms. West is optimistic it will eventually be operable and will assist her in completing most job tasks independently. Ms. West has a larger work space to accommodate the equipment.

Although the equipment facilitates Ms. West's ability to perform her duties, it results in staff always meeting in her office where the equipment is available, rather than in their work areas, where contact would be more practical. Ms. West has requested a laptop computer or an electronic note-taking device to allow more flexibility in scheduling activities in other settings. Lack of funds make Ms. West pessimistic about acquiring additional equipment.

When Ms. West was hired, training materials were not available in an accessible format. Some materials are now accessible, while others are still being prepared. She has received no assistance in developing computer-generated forms or macros to streamline word processing tasks and has spent considerable time developing these herself. Secretaries do not scan documents for her.

Because Ms. West is sensitive to the perceptions of other staff members, she obtained permission to work on lengthy quarterly assignments in the evenings with a secretary who earns overtime pay. Overtime is limited to this specific activity and to 10 hours every 3 months. The secretary provides reader services on an as-needed basis, though Ms. West is cautious not to use too much of her time due to staff complaints. Ms. West

Ms. West feels the pressure of learning the rehabilitation system and her role as supervisor while getting equipment running correctly and efficiently.

shares a secretary with two rehabilitation counselors; this is the same ratio of clerical support available to all agency service providers. Other secretaries provide minimal assistance on an as-needed basis.

The need for job site restructuring is apparent to Ms. West, who feels the pressure of learning the rehabilitation system and her role as supervisor while getting equipment running correctly and efficiently. She receives no special assistance or consideration from her supervisor in managing the workload as she transitions into the position.

Training/Retraining

Rehabilitation services assisted Ms. West in attending college and graduate school.

When Ms. West received her first computer from her employer, the rehabilitation counselor scheduled on-the-job tutoring for her. After receiving brief training in DOS and word processing, Ms. West learned additional computer skills independently. Currently, Ms. West is learning supervisory duties on-the-job.

Ms. West's rehabilitation counselor, who Ms. West also supervises, complained to the agency administrator about Ms. West's mobility skills. Ms. West explained to the administrator that she received orientation and mobility services over 20 years ago when her travel vision was quite useable and that she did not own a white cane. Arrangements were made for Ms. West to receive a roller-tip white cane and three orientation and mobility training sessions.

Motivation

Ms. West stated, "I need to work outside my home. I am much happier, have more energy, and I'm more content when I have a lot to occupy my mind. When I was a child, I always envisioned myself as working when I grew up, not just being a stay-at-home mommy." Ms. West wants to "carry my own weight" and doesn't like feeling dependent on others.

Any negative comments from coworkers inspired Ms. West to work harder to succeed. She didn't want anyone to accuse her of "slacking off". Positive comments from persons outside her immediate department were very encouraging.

Ms. West attributes her drive to retain employment to "just plain old work ethics". She never felt others owed her anything. Her culture, the community, her family heritage, and her denominational heritage told her, "...there was nothing worse than being lazy. It was very much a 'pull yourself up by your bootstraps' kind of environment." Work was stressed as important. Ms. West stated, "In our culture, you don't quit a job until you have a new one. It doesn't matter if you don't like your job. That's o.k. You don't quit a job if you have a family unless you

have another job to replace it."

Although Ms. West credits her employer, rehabilitation counselor, and spouse for their support, her real strength in retaining employment comes from her faith. She stated, "I'm a Christian and that gives me motivation to be determined to continue, to endure,...and to understand that sometimes what outsiders say is important, is not what is really important. How other people judge me is not what is really going to matter in the end. My Christianity gives me a different frame of reference for sometimes judging myself and judging other people. There is something beyond the moment. Something beyond the present difficulty. Something beyond the opinions of the one person I am dealing with at the moment. An eternal perspective so that whatever is going on at the moment is less important than what is going to go on for the rest of the world. Minimize present difficulties because there is a goal beyond them."

Rehabilitation Services

Rehabilitation services give "people the skills to get a decent job instead of a minimum wage job, which is the only thing many people with disabilities might be able to get otherwise. They would be cut out of advancement and higher level entry positions because of their background and because of their disability. When you provide education, you level the playing field some...you provide adaptive equipment and technology, you level the field. Somebody who really wouldn't have a fair chance gets up to the level of everybody else and has the opportunity to succeed, if they have all of the other requisites for success, like desire to work hard and the expectation that...if they are disabled, they are going to have to work harder than the non-disabled person to achieve the same results." Ms. West credits rehabilitation services with her ability to get an advanced degree and training using computers and adaptive equipment.

Employer Issues

Ms. West learned about possible employment with a state agency through contact between the supervisor and her spouse. The supervisor was aware of Ms. West's visual disability. When a position became available that did not require driving, Ms. West was contacted for an interview and hired.

While employed with the agency, Ms. West received her first computer and adaptive equipment. She was given time on the job to learn to use it, including having her computer tutor at the job site.

When budget cuts eliminated Ms. West's position, the supervisor had the option of terminating her. Instead, she

allowed Ms. West to develop her own job assisting other units. The supervisor was committed to keeping Ms. West employed, but ultimately Ms. West was offered a promotional opportunity with rehabilitation services.

Ms. West believes she was hired at the rehabilitation agency because she is viewed as highly motivated, can work independently, and does not require close supervision. She is learning the job and her goal is to complete 95% of the duties without assistance. Although Ms. West supervises counselors and rehabilitation teachers, she has never been employed in either capacity. Ms. West hopes to create a team at the rehabilitation agency and would like the staff to trust her, accept her, and provide mutual support.

Ms. West believes that if she were employed in the private sector, a reader would have been made available while her scanner was being obtained and set up. After the scanner is operational, the need for a reader would be minimal.

Coworker Issues

Most coworkers at the first state agency regarded Ms. West as a courageous woman who worked hard. Others felt she was a "privileged character" with a computer and special training in

**Some staff demonstrated prejudice
toward Ms. West because she is blind.**

its use. Ms. West described, "I've had the experience of being admired and being really disliked for the exact same reason, because I had to do things differently and I was being allowed, even though I was working very hard, to learn the skills that were required."

Ms. West is the first supervisor at the rehabilitation agency for the blind who is totally blind. Some staff were openly critical of Ms. West, stating that she was unqualified. Some staff demonstrated prejudice toward Ms. West because she is blind. Despite the experience of working with clients who are blind, some staff begin "scurrying for things to pull out of the way" when Ms. West enters a cubicle. Some coworkers appear to have "very low expectations about what a visually impaired person can accomplish." Ms. West feels she is being watched every second and any mistakes are attributed to her vision loss. Some staff appear resentful and to have an unreasonable belief about the amount of assistance, particularly clerical support, Ms. West requires.

Ms. West relies on her faith to sustain her when conflicts occur. She takes her job "a day at a time, like AA." She doesn't look into the future, but instead, looks for "the lessons of the

day". She feels disadvantaged in her job because she is unfamiliar with the rehabilitation system, has never been in a supervisory position before, is learning to use new equipment, is having difficulty getting the equipment to work correctly, and because she is the first and only supervisor at the agency who is totally blind. Ms. West receives words of encouragement from the administration, but feels her performance is compared to seasoned supervisors with no visual impairment. Ms. West is becoming increasingly frustrated with the failure of the administration to provide tangible support, but if she brings these issues to the attention of her supervisor, she is, "labeled as the whiner or complainer."

Family Issues

Before accepting the supervisory position with the rehabilitation agency, Ms. West made a list of the pros and cons of making the change and discussed these with her spouse. He was supportive of her decision to accept the supervisory position with the rehabilitation agency.

Personal Issues

Leaving a job where she was secure, independent, and satisfied, was a difficult decision for Ms. West. She was attracted to the rehabilitation agency because it provided an opportunity to learn more advanced technological skills, to work closely with a small group of people, and to advance her career. She was concerned about losing her job independence, at least temporarily, and dealing with unreceptive staff. Her faith influenced her decision to make the change. Ms. West related, "I didn't think the factors had changed, but I felt like something within me had changed. I believed that it was God giving me peace about entering into this new situation in spite of the cons. I also felt that there were many things about the timing of all this coming that made me feel like He was opening a door, and that in some sense, I almost had an obligation to walk through it..."

Ms. West learned Braille as an adult, but feels she is not proficient enough to take notes quickly. It has been difficult for her to admit that she has difficulty completing job tasks as quickly as a person without a vision loss. She states, "I have to admit that it takes me longer. No matter how well I do my job or how hard I try, I could do it faster if I could see. I think that's an idea I really resist. I think I can do as much work as anybody else. I don't think I can do more. Right now, I think they are asking me to do more."

Recommendations

Ms. West recommended that if you have a visual loss, "Don't quit, work hard. Look for the solution to your problems and accommodation issues and present those to your employer in a positive light. Do research and find the solutions yourself." For a person with a visual disability, any accommodation or adaptive equipment requires a tremendous amount of learning. A real investment, in terms of time and energy, is required to make adaptations successful. Ms. West cautioned others not to think, "somebody is going to do all of it for you and all you have to do is plop down in the chair and start to work." Ms. West does, however, have empathy for those striving to compete with sighted peers. "Reality is, when you are visually impaired, it does take you longer to do things."

Rehabilitation Counselor Perspective

The rehabilitation counselor, Ms. Kane, has known Ms. West since 1979, when Mr. West was her client and a student. When Ms. West completed school and independently found employment, her case was closed. However, it was re-opened for postemployment services when she changed jobs. Ms. Kane is in the unique position of being Ms. West's rehabilitation counselor, as well as being supervised by Ms. West. Ms. West has always taken an active part in the development of her IWRP.

Job Site Modification/Job Restructuring

The initial employer purchased a computer for Ms. West. Rehabilitation services provided adaptive equipment and software. Ms. West used a scanner to access printed documents, a Braille typewriter for note-taking, and voice synthesis on her computer. After several years with this agency, she transferred to her current position with the state agency providing rehabilitation services.

A scanner has been obtained by the present employer. Because of difficulty getting the scanner to work, Ms. West "has required an enormous amount of help from the secretary." A reader has not been provided but three secretaries have been helping her. This assistance is required because after a case is hand written, a secretary types it and puts it on diskette for Ms. West for review and approval. Because many agency documents continue to be hand written, the three secretaries take turns assisting her.

Efforts are currently underway to make the agency's three-volume policy manual accessible to Ms. West.

Training/Retraining

After Ms. West obtained a computer and equipment from the employer, rehabilitation services had a computer evaluation

completed and hired an instructor to provide on-the-job computer training. The employer also provided some in-house computer training.

Employer Issues

Ms. West is the first person to work as a supervisor at the rehabilitation agency for the blind who cannot access standard print. She was hired by the director of the agency and his assistant, neither of whom are familiar with the administration of a rehabilitation agency. According to the rehabilitation counselor, Ms. West was hired because a relative is employed with the agency, because she is blind, and because she has a degree that qualifies her for the job. When she started her job, it was in the midst of extensive agency reorganization. Although the administration was supportive, mechanisms to provide tangible support had not been developed.

Coworker Issues

The rehabilitation counselor reported that coworkers anticipated some problems due to Ms. West's lack of experience in supervision and rehabilitation administration. Ms. West's reliance on clerical support has caused some friction in the office.

Ms. West rides the bus to and from work, then walks the last few blocks. Instead of using a white cane, she was using a sighted guide. Coworkers felt Ms. West's lack of mobility independence was "giving blind people a bad name," and reported her behavior to the agency director. Ms. West has since begun using her white cane. Coworkers want her to ask for help when she needs it, but would like to see her be as independent as possible.

Personal Issues

Ms. Kane believes Ms. West's "tenacity is the reason she is still working. It's quite difficult for her." Ms. West is bright, has a strong character, and is very dedicated to working. Ms. Kane thinks a great deal of Ms. West. She anticipates that before leaving the job, Ms. West will know more about rehabilitation than any current staff.

Recommendations

Ms. Kane advised other rehabilitation counselors working with persons unable to access print to have the necessary evaluations and consultations to determine what needs to be done. Be sure the equipment you purchase for clients works together. Have a list of people you can rely on for help.

Provide people who are blind with some exposure to computers with adaptive equipment. Although they might not immediately be convinced to begin using it, it gives them something to think about. Sometimes they come back later and decide they are

interested. Technology helps them get a vision of what is possible.

Employer Perspective

The worker requested that contact be made with her previous employer rather than with her new supervisor at the rehabilitation agency for persons who are blind. Ms. Scott is the administrator for a large state agency that hired Ms. West.

Job Site Modification/Job Restructuring

Ms. West brought a Braille writer to the job. Most duties were completed over the telephone so direct contact was required only when persons visited the office. Initially, there were no computers in any offices.

After Ms. West had done everything she could to enhance her work, the agency technical support staff began working with her to determine whether adaptive equipment would be helpful. The technical support staff, Ms. Scott, and Ms. West worked with rehabilitation services to identify and obtain appropriate equipment. A computer with voice synthesis was obtained. The work area was made larger to accommodate Ms. West's equipment.

Although coordinating the equipment needs was sometimes difficult, Ms. Scott, Ms. West, and others involved became invested in the process. Everyone regarded the situation as a challenge. Ms. Scott related, "We wouldn't have given up for anything." When Ms. West left her position, she took her equipment with her.

Training/Retraining

When the computer was finally connected, Ms. West knew nothing about how to operate it. Rehabilitation services provided on-the-job computer training for her, though it took quite a while to get that service.

Employer Issues

The employer was familiar with Ms. West through contact with her spouse. When Ms. West initially approached Ms. Scott about employment, all positions with the agency required workers to make home visits. Ms. Scott was very impressed with Ms. West and felt she would make a professional contribution to the agency. Ms. West was very up front about what she could and could not do. To get on the state register for employment, she had to meet all job qualifications. When a position became available where travel was not required, Ms. Scott was pleased to offer Ms. West the position.

Ms. West's files were the best organized files in the department. She took excellent referrals and did excellent work. Ms. West developed a reputation among the emergency services

community due to her skill in finding resources within the community and connecting persons in emergency situations with food, shelter, utilities, etc. Community members were always making positive remarks about how well she did her job, how responsive she was to people, and how interested she was in her work and those in need.

When the agency lost funding for Ms. West's position, she began working for another service within the agency. Through use of her intelligence, education, technology, and motivation, Ms. West did an excellent job. Her referrals were the best the review team had read anywhere in the state.

Ms. West subsequently took a promotional opportunity with another state agency because the initial agency was unable to offer a comparable salary.

Coworker Issues

The only problem between Ms. West and coworkers occurred when she was learning to use new equipment. She was away from her routine job duties for several hours each day and other workers had to perform her duties. Because of the high workload in the agency, this was sometimes frustrating to other workers. However, once Ms. West learned to use the equipment, everything was resolved. Not one staff member ever complained about Ms. West getting the equipment. All the staff were amazed that Ms. West learned to use the computer so quickly.

Ms. West interacted well with her peers. She was included in birthday lunches, etc. when she chose to participate. Ms. West took a lot of the responsibility for making the situation work.

Rehabilitation Services

Rehabilitation services worked with the employer in obtaining equipment for Ms. West. Ms. Scott met with the counselor on several occasions. It was, however, a very slow process.

Personal Issues

The employer stated that Ms. West came to the agency with very little equipment. She managed to do a good job under difficult circumstances. The staff wanted to do what they could to make her workload more manageable. Ms. Scott hoped that assisting Ms. West in getting equipment would make her more likely to stay with the agency.

Ms. West "goes about making a job her own. She is real good about doing everything she can to make the job meaningful and doing a good job." Ms. Scott observed that whether Ms. West "felt patient or not, she acted that way. She was patient with [the staff]:" Ms. West was willing to learn new things, was motivated, was professional, and worked much harder to get her work done.

Recommendations

The employer recommended that persons with visual impairments retaining their jobs must keep a sense of humor, be forthright and open, and be willing to educate the employer. Employees should have a plan to correct any problem brought to the supervisor (i.e., be part of the solution).

If an employer is considering hiring a person with a visual impairment, contact with the rehabilitation agency would be very helpful. Rehabilitation services can provide a great deal of information to put the employer at ease. Employers need to educate themselves about working with persons with disabilities.

Significant Other Perspective

The significant other is Ms. West's spouse.

Employer Issues

According to her spouse, Ms. West's biggest struggle in her efforts to retain employment was being unable to readily access printed materials. She would come home very frustrated because the technology was not available or was not working correctly and reader services were not provided. Despite being employed by the state agency providing services to persons who are blind, there is difficulty, primarily due to budget problems, getting the employer to accommodate her needs. Being unable to access print and the lack of accommodations caused Ms. West considerable hardship on the job.

No one took responsibility for planning or doing ground work to prepare for a person who is blind performing supervisory duties. The agency director kept telling Ms. West to "hang in there," as if that would solve the problem. If she had been able to access printed documents, Ms. West could probably have managed on her own. After 8 months on the job, the director finally obtained a temporary person to transfer the policy manual to accessible format and some overtime hours for her secretary. If the employer had the appropriate technology in place when Ms. West started working, many of the problems she encountered could have been avoided. Or, if the employer had hired a reader to work even half-time with Ms. West, it would have helped her a great deal.

Problems have also occurred because the equipment Ms. West has and the equipment that was obtained did not all interface correctly with agency equipment. Getting vendors to come in and hook up equipment, or getting technicians in to work on things, has been very difficult and time-consuming.

The director is committed to filling key positions within the agency with people who are blind. His support and commitment have been significant issues in this job being offered to Ms. West. Although this support has been helpful, other factors have

affected the ability of the agency to provide support in the form of accommodations.

Coworker Issues

When Ms. West started her job, those she supervised treated her badly. Some workers had 10 to 15 years experience in rehabilitation and did not think someone without rehabilitation administration experience could supervise them effectively. Another worker felt Ms. West's travel skills were poor and that she was not fully independent and thus could not supervise persons providing services to those who are blind. These judgements were incorrect and had a devastating effect on Ms. West.

Family Issues

Mr. West admits there were times when he wished his spouse had not accepted the supervisory position. Although he knew she would succeed in the job, he also knew it would be a struggle for her due to her perfectionistic personality and high expectations for herself and others. It is frustrating for Ms. West to realize that those she supervises don't necessarily strive for perfection. But he feels she has done an excellent job building relationships with her staff and has learned a lot about herself and the supervisory relationship.

Throughout the process of the job change, Mr. West has encouraged his spouse that she will be a good supervisor and can do the job. His main concern has always been that she would not be happy in the job.

Personal Issues

When Mr. and Ms. West were married, they agreed they would rely on Mr. West's income. Ms. West entered the workforce when their children started school.

Mr. West says his spouse is a perfectionist in the most positive sense, and is very organized. She immediately tries to perform at 100%. Ms. West is self-assured, intelligent, confident, and has a lot of endurance. When she was young, she learned to be self-assured and to have work ethics. She was not sheltered; she was given the same opportunities as everyone else.

Recommendations

Mr. West advised that if you have a child who is blind, do not shelter them. If you are the significant other of a person who is blind, keep reminding the person they are skilled and capable, and keep insisting they get the assistance needed to do their job. Also, listen a lot and be supportive. Don't feel that you have to fix the problem.

If you are blind and are trying to retain your job, find creative ways to let your employer know you need assistance to perform your job tasks. Each person must keep expressing their needs over and over again.

Survey Results

The results of the survey completed by the subject, rehabilitation counselor, employer, and significant other found general agreement general in 7 areas. All 4 respondents agreed that the role of the employer and the personal characteristics of the worker were "critically important", and that the role of cooperation with organized labor was "not important". In regard to the role of the significant other in influencing job retention, the significant other rated it as "very important" whereas the other 3 respondents rated the role as "critically important". In regard to the importance of a change in job duties or the job description, the subject and the significant other assigned a rating of "very important" and the employer and rehabilitation counselor assigned the next lower rating of "somewhat important". In regard to a change in the physical surroundings at the job, the significant other assigned a rating of "somewhat important" and the other 3 respondents rated it as "very important". In rating the importance of the role of the rehabilitation counselor, the significant other assigned a rating of 2, or "not important"; the other 3 respondents assigned a rating of 3, or "somewhat important".

Areas of disagreement did not appear to follow any uniform pattern. The subject and significant other assigned a "not important" rating to the importance of coworker attitudes whereas the employer and rehabilitation counselor both stated coworker attitudes were "very important". Financial issues were rated as "somewhat important" by the subject and the significant other, although the rehabilitation counselor rated it as "not important" and the employer said the financial issues actually "hindered the ability" of the subject to retain employment.

In the area of transportation, both the subject and the rehabilitation counselor said it was "not important" in influencing job retention, and the significant other said it was "very important" and the employer said it was "critically important". Other differences of opinion occurred in assessing the importance of the rehabilitation process in job retention, with the employer stating it was "not important", the subject and significant other stating it was "very important", and the rehabilitation counselor rating it as "critically important". Retraining garnered the most discrepancy in ratings with the significant other reporting that it was "not important", the employer stating that it was "somewhat important", the rehabilitation counselor stating it was "very important", and the subject reporting that retraining was "critically important".

Table 8. Survey Results: West

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	3	2	3	3
Rehabilitation process	4	4	2	5
Significant other	5	4	5	5
Employer	5	5	5	5
Change in job duties or job description	4	4	3	3
Change in physical surroundings at job	5	3	5	5
Cooperation with organized labor	2	2	2	2
Retraining	5	2	3	4
Transportation	2	4	5	2
Financial issues	3	3	1	2
Coworker attitudes	2	2	4	4
Personal characteristics of worker	5	5	5	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Ms. Carson

Worker Perspective

Ms. Carson is employed as a mail clerk with a mail distribution center in the southwestern part of the country. In addition to her visual disability, Ms. Carson has a severe hearing impairment and brain injury, subsequent to brain surgery for a tumor she had as a child. She is the only worker at the job site with a visual disability; several coworkers have hearing impairments. She lives alone and is enrolled in college courses on a part-time basis.

Job Site Modification

Ms. Carson utilized the services of a job coach at a rehabilitation facility to assist her in finding employment, which took approximately 1 year. After becoming employed, the job coach assisted her in learning job tasks and devising techniques to speed productivity and insure accuracy. The job coach initially spent long periods at the job site, but gradually reduced contact. Ms. Carson felt she would have been unable to get or retain her job without the assistance of the job coach.

Some visual aids (i.e., magnifiers, a monocular) are required for Ms. Carson to complete job duties, such as sorting and bundling mail. At one time, she used a CCTV, but determined that magnifiers were more efficient. The employer has painted outdoor steps to the building with contrasting paint and made the steps wider to assist Ms. Carson in accessing the building independently.

Job Restructuring

Ms. Carson is unable to complete several job tasks as quickly as sighted workers; other workers complete these duties. The employer allows Ms. Carson to have a somewhat flexible schedule due to problems with the transportation system and her school schedule, but she is required to work full-time.

Transportation

The area paratransit system provides Ms. Carson with transportation for a reduced fee. Long waiting periods interfere with her work and school schedule.

Motivation

Ms. Carson stated that whether or not a person has a visual impairment, income is needed. Finances were a big part of her motivation to work. The lack of opportunity for mail clerks to advance from their current positions is one of the motivating factors in Ms. Carson's decision to pursue college courses.

Ms. Carson has considered pursuing a degree in social work, or a job working with animals, but her main goal is to acquire

skills necessary to obtain a more highly skilled and better paying job. Her current job requires minimal skills and Ms. Carson would prefer to have more challenging work.

Independence is another motivating factor. Ms. Carson is pleased to be living independently for the first time. She continues to be concerned that she would become too dependent on her family if she lived with them.

Rehabilitation Services

The rehabilitation counselor arranged for placement in a rehabilitation facility specializing in independent living services for persons with brain injuries. The center stressed job-seeking skills, coworker relations, and provided a job coach.

Employer Issues

The employer provided 6 months of on-the-job training before offering permanent employment. The job coach was present on the job full-time during this 6-month period. When the supervisor introduced Ms. Carson to the other employees, she told them that Ms. Carson had a visual impairment. However, Ms. Carson later provided more specific information to the coworkers regarding her condition and capabilities.

Several coworkers have hearing impairments. Most coworkers are very helpful. They provide verbal warnings when obstacles are left on the floor. Ms. Carson has lunch and takes breaks with them. Sometimes it is difficult for Ms. Carson to ignore coworkers' jokes about her lack of speed performing job tasks.

Personal Issues

Ms. Carson described herself as friendly, outgoing, and having a positive attitude. She gets along well with others. She attended public school and other students were familiar with her disabilities. Ms. Carson attended college but had difficulty completing the required work. She left school and obtained employment, but has returned to college on a part-time basis.

Recommendations

Ms. Carson recommended that upon becoming employed, develop a good relationship with your coworkers and don't gossip about them. Show coworkers that you are like everyone else. Let the employer and coworkers know they do not have to avoid mentioning visual impairments or blindness. Tell them why you have the visual impairment so they do not have suspicions or wonder about your condition. Ms. Carson stated, "I just say, 'I had a brain tumor but I am better now.'... if they know, they will understand, and if they understand, they will feel more comfortable."

Rehabilitation Counselor Perspective

The rehabilitation counselor, Mr. Sams, began working with Ms. Carson when she was a college student. Ms. Carson had withdrawn from the occupational therapy program and was undecided about a degree; she finally withdrew from college. Ms. Carson was living with her parents, who protected and did many things for her.

Job Site Modification/Job Restructuring

All optical aids, like the low vision glasses, monocular, and magnifiers, and the CCTV, were paid for by rehabilitation services. The employer allowed the job coach to work with Ms. Carson on-site for 6 months, but the rehabilitation agency paid for the service.

Mr. Sams did not have direct contact with the employer because the job coach functioned as a liaison between them. He was aware that the employer agreed to make modifications to Ms. Carson's schedule due to transportation problems.

Training/Retraining

Ms. Carson attempted working in a clerical position at a community rehabilitation program for persons with visual impairments. The placement was not successful. Ms. Carson had such a negative experience at college; she needed a positive training or employment experience and intensive support the placement could not provide.

Mr. Sams subsequently referred Ms. Carson for independent living skills training at a rehabilitation center for persons with brain injuries. Ms. Carson lived in the center, moved to a group home setting, and then to an apartment. She learned orientation and mobility skills, including how to utilize the bus system. As part of the rehabilitation program, Ms. Carson received job-seeking skills and job readiness training, and utilized the services of a job coach. She participated in volunteer work at a nearby hospital. After approximately 1 year of residential services, Ms. Carson was placed in her current job. She received follow-up services from the rehabilitation center for approximately 1 year, then her rehabilitation file was closed. Her file was re-opened when she applied for assistance enrolling in college again. She retained her employment, and is pursuing additional training.

Transportation

Orientation and mobility training was provided to Ms. Carson while she was in training at the independent living center. She learned to utilize the city bus system; she currently uses the paratransit program within the city.

Personal Issues

Mr. Sams related that according to others, Ms. Carson, "couldn't do this and couldn't do that. But she is a bright and strong young woman. When she received independent living skills training, it was like watching a flower open up. She became extraverted and assertive. The rehabilitation center provided intensive assistance and role models."

Ms. Carson is now involved in social and community activities, including volunteer work. She is completing college coursework. If she had stayed at home with her parents, they would have protected her too much and she would never have done these things.

Recommendations

The rehabilitation counselor recommended that when working with a person with multiple disabilities, it is often helpful for the person to work in a smaller business. It is easier for the client to learn the job routine and there are fewer distractions. Believe in your clients and encourage each client to believe in him/herself.

Know the client's capabilities and limitations. Get a good evaluation. Use other resources for assistance evaluating clients and getting recommendations. Go the extra mile. Listen to the client and really hear what they say more than you do anything else. Do not go rushing through plan development and implementation. Proceed slowly, but keep in contact with the client so they are always aware of what you are doing. Clients get upset when they are uninformed. Mr. Sams stated, "The moment I certify someone for services, that same day I am already setting up appointments at the same time so that the consumer does not have to wait; so many counselors wait until the last minute to do something and expect the vendor to jump through hoops to get it done...Vendors know my word is gold...I have built up a reputation. When I call a vendor for something, they bend over backwards to try to help me."

Be very organized with case management activities. Follow-up with all clients and follow-through when you say you will do something. Use a tickler system so no one falls through the cracks.

This state rehabilitation agency is phenomenal in its response to counselor needs and recommendations. The administration listens to counselors and tries to make positive changes. It is a pleasure working for this agency.

Employer Perspective

Ms. Carson works for a branch of a national company that sorts and bundles mail by zip code for customers around the city and forwards the bundled mail to the postal service. Mail is stamped by hand and with a meter for first class, fourth class, and bulk mailings. Inserts are put into mailings by hand and machine. Mail is folded, labeled, and put in envelopes, depending on customer needs. There are approximately 26 employees. The supervisor was unaware whether other branches of the company hire persons with disabilities.

The employer, Ms. Nelson, reported that she had to be cautious about her own maternal feelings toward Ms. Carson. After Ms. Carson was employed on the job a few days, she attempted to go alone to a nearby fast-food restaurant for lunch. The employer asked her to go with coworkers. It took Ms. Nelson some time to realize that Ms. Carson has the skills to be independent.

Job Site Modification/Job Restructuring

The employer reported that Ms. Carson's speed on some tasks is slow, but she is very conscientious. She usually labels letters and puts things in order by zip code. She is able to perform all job tasks without modification, other than her magnifiers.

Ms. Nelson was agreeable to allowing Ms. Carson flexibility in her work schedule to accommodate her transportation problems and college courses. Ms. Nelson said she realized Ms. Carson was a bright woman and wanted to be supportive of her.

There was concern about Ms. Carson's ability to navigate the work environment as boxes, gurneys, hampers, and cords are frequently left on the floor in different places. After a discussion with Ms. Nelson, Ms. Carson agreed to be cautious and use her white cane. There has never been a problem with this and Ms. Carson now moves throughout the workplace without her cane. The employer did have a special non-stick surface put on the steps outside of the workplace, though Ms. Nelson related that this made the steps safer for all workers.

Training/Retraining

The employer related that Ms. Carson learned to be very organized at the rehabilitation center and relied very much on the specific techniques she learned at the center when she started the job. As Ms. Carson became adjusted to the job duties, she developed her own skills and techniques and the job duties became second nature to her.

Ms. Carson was given a longer period to learn new tasks; other than that, she received no special training from the employer. The job coach and rehabilitation counselor did work with her and provided assistive equipment, but Ms. Carson coordinated those services herself.

Rehabilitation Services

Due to the repetitive nature of pre-sorting mail, the business has a fairly high turnover rate among staff. The employer is frequently approached by rehabilitation centers, counselors, and schools for persons with disabilities, seeking job openings for clients and students. Consequently, the employer has experience working with persons with disabilities, primarily those with hearing impairments. Ms. Carson is the first employee with a visual disability. Though the rehabilitation counselor was available to provide assistance, it was not needed. Ms. Carson was able to handle the interview, placement, and adjustment to the job independently, with the exception of services provided by the job coach.

Coworker Issues

According to the employer, Ms. Carson fit into the workplace easily. She is the first person the other employees worked with who has a visual disability, though some coworkers have hearing impairments. Coworkers "took her under their wings" and perhaps gave her too much assistance, but Ms. Carson handled that well. She was friendly with the others and they respect her. She does not need sympathy; she "can handle this world on her own."

Personal Issues

The employer stated that what has allowed Ms. Carson to retain her job is her attitude; she is always willing to do more than what is expected of her. Her most positive quality is that she is very determined, perhaps even stubborn. She is conscientious and has good work habits.

Recommendations

The employer stated that if you are an employer and a person with a disability wants a job with your company, pay close attention to the person's attitude and personality. Ms. Nelson stated, "Why not hire them [persons with disabilities]. Other than their impairment, they are normal people...Some of them make it, some of them don't...People with impairments usually try harder, at least in the beginning." If you are a person with a disability, your main task should be to sell yourself to the employer when you apply for a job.

Significant Other Perspective

The significant other is Ms. Carson's mother, Mrs. Carson, who lives in a city some distance from her daughter.

Training/Retraining

According to Mrs. Carson, at the rehabilitation center Ms.

Carson learned to be independent, to use public transportation, to shop, and to organize her time. She even likes to go shopping now, which she did not enjoy in the past. She is independent and has developed a support system for when she needs help.

Employer Issues

The employer has been very considerate of Ms. Carson's needs. Coworkers sometimes speak in Spanish, causing Ms. Carson to be left out of their conversations, but she has learned to adapt. No one provides her preferential treatment, and it is not necessary to do so.

Rehabilitation Services

The family became aware of rehabilitation services from a friend. They contacted the state agency and were referred to a rehabilitation counselor. They had no idea what services would be provided.

Mrs. Carson had ongoing contact with the rehabilitation counselor, but little contact with the job coach or others at the rehabilitation center. The rehabilitation counselor did an excellent job arranging services to teach Ms. Carson to become independent. The counselor did everything he could do to provide assistance. The most important thing ever done for Ms. Carson was placement in the rehabilitation facility.

Family Issues

Mrs. Carson felt that she sheltered her daughter throughout her high school years. Ms. Carson had to work very hard on her school work and, consequently, did not have the opportunity to be around others her own age in social settings. Ms. Carson is

The family tried, through good parenting skills, to instill in Ms. Carson the importance of being independent.

finally having the chance to experience some of the things others typically experience when they are younger. She is learning social skills and having more social experiences. She has friends and a support system. She is doing well and enjoying life.

The family tried, through good parenting skills, to instill in Ms. Carson the importance of being independent. They emphasized that it was not her brother or sister's responsibility to take care of her when her parents were no longer able to do so. Ms. Carson was told there was no reason for her not to take care of herself. When she had difficulty maintaining employment, her parents stressed that many people have trouble finding the right

job and that she had to be persistent in her efforts.

While she may have been overprotective of her daughter at one time, Mrs. Carson always wanted the best for her. Mrs. Carson believes her daughter is intelligent, but slow completing tasks due to her visual and hearing impairments. Employers are concerned because Ms. Carson works slowly. She wanted Ms. Carson to get as much education as possible and to be employed in a good job.

In the future, Mrs. Carson hopes to see her daughter in a more meaningful job that is intellectually challenging to her. She would like to see Ms. Carson meet someone, get married, and have

**The most important thing ever
done for Ms. Carson was
placement in the rehabilitation
facility.**

children.

Personal Issues

According to her mother, Ms. Carson is sometimes unhappy with her job, which is very routine. She is capable of doing more challenging things. This work experience has been a motivator to her. Ms. Carson now realizes that to get ahead, she must do things for herself.

Ms. Carson has her own desires, but does not know what her job goals are. Without help or encouragement from her parents, Ms. Carson contacted the rehabilitation counselor and enrolled in college classes. This is an example of her new independence. She loves to be on the go and doing things.

Everyone loves Ms. Carson. People say she is nice, very loving, and caring. She enjoys being around other people and communicates well. She knows a little Spanish because the family lived in Spain for some time. She makes friends easily and they help her when she needs it.

Recommendations

Mrs. Carson recommended that if you have a child with a disability, encourage them as much as you can. To help them, you must learn to let them go.

Survey Results

An examination of the completed surveys found both agreement and disagreement among the respondents. The rehabilitation counselor failed to respond to items assessing the importance of:
(a) the employer on job retention, though Ms. Carson and the

significant other rated the employer as "somewhat important" and the employer rated the role as "very important"; (b) a change in the job duties or job description, though Ms. Carson rated this item as "somewhat important" and the significant other and employer rated this item as "not important"; (c) a change in the physical surroundings at the job, which the other 3 respondents rated as "not important"; and (d) coworker attitudes, which Ms. Carson and the significant other rated as "somewhat important" and the employer rated as "very important".

All 4 respondents were in general agreement about the importance of the rehabilitation counselor to successful job retention; the significant other assigned a rating of 5, or "critically important", while the other 3 respondents assigned a value of 4, or "very important". The 4 respondents also agreed that cooperation with organized labor was not important to job retention; the rehabilitation counselor reported the personal characteristics of the worker were "very important" to job retention, while the remaining 3 respondents stated that it was "critically important".

On 3 items, Ms. Carson and the employer were in perfect agreement and the significant other and the rehabilitation counselor were in perfect agreement, although the pairs differed from each other. In regard to both retraining and transportation, Ms. Carson and the employer assigned a rating of "not important" while the significant other and the rehabilitation counselor assigned a rating of "critically important". When assessing the impact of financial issues on job retention, Ms. Carson and the employer assigned a rating of "not important" but the significant other and the rehabilitation counselor assigned a rating of "somewhat important".

Other areas of disagreement were in the areas of the rehabilitation process, where Ms. Carson and the significant other assigned a rating of 5, or "critically important", and the rehabilitation counselor and employer rated it as "somewhat important" and "not important", respectively. The importance of the significant other on job retention was rated very important" by Ms. Carson and the employer, "somewhat important" by the significant other, and "not important" by the rehabilitation counselor.

Table 9. Survey Results: Carson

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	4	5	4	4
Rehabilitation process	5	5	2	3
Significant other	4	3	4	2
Employer	3	3	4	0
Change in job duties or job description	3	2	2	0
Change in physical surroundings at job	2	2	2	0
Cooperation with organized labor	2	2	2	2
Retraining	2	5	2	5
Transportation	2	5	2	5
Financial issues	2	3	2	3
Coworker attitudes	3	3	4	0
Personal characteristics of worker	5	5	5	4

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Mr. Helios

Worker Perspective

Mr. Helios is 53 years old and has been an architect for approximately 23 years; he is currently self-employed. Mr. Helios has had glaucoma for approximately 35 years, resulting in legal blindness 3 years ago. He is married with two adult children and lives in the northeastern part of the United States.

Job Site Modification/Job Restructuring

Mr. Helios employs a consultant to assist him in his work as a self-employed architect. He anticipates hiring a registered architect who can provide assistance with tasks requiring vision.

Equipment necessary to complete job tasks include a computer with a 21" monitor and software programs to enlarge images, magnifiers, and a 20" CCTV.

Due to his vision loss, Mr. Helios was unable to complete all job tasks. Technology initially allowed him to keep his job, though he sustained a reduction in salary. He eventually left his employer and started his own business. He has been self-employed for the past 2 years.

Training/Retraining

Mr. Helios became familiar with specialized technological equipment for architects through his professional association. After obtaining his own equipment, he learned skills through practice and from coworkers. He continues to need additional training in computer access technology.

Mr. Helios is interested in receiving orientation and mobility training to become more comfortable traveling throughout the metropolitan area.

Transportation

Orientation and mobility training has not been provided to Mr. Helios and he was unaware such services are available. He travels independently throughout the area using public transportation, but is uncomfortable doing so, and it takes him a long time to get from one place to another. He has missed buses due to difficulty seeing numbers on them.

Motivation

Mr. Helios never considered leaving the workforce. Even when having difficulty completing routine work, he found other things to do. He completed small jobs to stay busy and continue to earn money. His spouse's income helped support the family when his income was reduced. His children were basically self-supporting.

Mr. Helios attributes his motivation to continue working to his family upbringing. He quoted his mother saying, "Work hard and you will be fine. Don't give up." Additionally, Mr. Helios is

committed to being an architect. It is a demanding profession he has always enjoyed.

Although he was agreeable to accepting assistance from rehabilitation services and accepts the tax benefit for persons who are blind, Mr. Helios draws the line at accepting disability benefits. He feels he cannot accept aid from the government because of his visual disability.

Self-Employment

Mr. Helios believes it is difficult for others to understand how a person can be legally blind and work as an architect. He explains to potential clients what he has to offer. After getting to know him better, persons are more aware of how he can assist them. Most persons are looking for skills and ability and when they see he has the technical expertise, they are agreeable to giving him a chance.

Mr. Helios' experience as an architect provided him the knowledge to continue in the profession with the assistance of a sighted person. He contacted a government agency assisting persons with disabilities to obtain information about bidding on government contracts as a minority business owner, based on his vision loss. This information was helpful in getting his own business started.

When bidding on a contract, government employees are aware that the bidder is from a minority-owned business but are not aware of the nature of the minority status. In advertising, Mr. Helios identifies himself as having a disability; he does not disclose the nature of his disability. Individuals or companies needing or desiring minority participation in project development sometimes contact him for information. He is becoming a specialist in the architectural requirements of the Americans with Disabilities Act (ADA), and offers consulting services to architects and private clients needing assistance in that area.

As demand for his services increases, Mr. Helios encounters additional barriers to completing his job. He tries to address each problem as it comes along. He hopes to be able to hire a sighted architect to provide assistance with these issues. He is pleased to have work available and is optimistic about increasing opportunities in the future. He believes the potential for growth is available. He describes his job situation as, "like starting all over again."

Now that he is self-employed, Mr. Helios is doing better financially than when he was employed for someone else, even

His visual impairment forced him to look at his career with his "back against the wall" and determine the best way to proceed.

though he now has a visual impairment. Mr. Helios stated, "I can almost whisper in the back of my mind, 'Boy! You are lucky that you are blind.' That sounds crazy, but the fact of the matter is that this last year I have this little project for the city...I was paid well...There is potential for more work at the same level; the potential gets better and better." His visual impairment forced him to look at his career with his "back against the wall" and determine the best way to proceed. He is trying to make it work.

Rehabilitation Services

The doctors who examined Mr. Helios referred him to the state agency for rehabilitation. Mr. Helios knew that the agency provided services for persons who are blind, but had no idea what the services would be. He was referred to a rehabilitation center for an evaluation; it was at least 3 to 4 months before the evaluation was scheduled. Evaluation results indicated that a computer with enlarged print capacity would be helpful to him on the job.

The process to obtain a computer was unfamiliar to the rehabilitation counselor, as Mr. Helios was one of the first persons in the state to get this equipment through the agency. It took more than a year to get the computer, then the specialized systems and additional equipment had to be obtained. The rehabilitation counselor hired outside consultants for assistance integrating the equipment into the work site.

After the equipment was installed at the work site, it did not function properly. The rehabilitation counselor hired a second team of specialists to visit the workplace and make recommendations regarding what was needed. The second group did another evaluation and changed some of the equipment recommendations. The first group did not appear to understand what the technology needed to accomplish. Mr. Helios also purchased some of his own equipment.

The rehabilitation counselor visited the job site, met with the employer, spoke to previous employers, and verified Mr. Helios' credentials. The rehabilitation counselor was not knowledgeable about technology issues and tried to get information from others regarding what was needed. He obtained computer equipment and had it programmed for Mr. Helios, who was required to match a certain amount of the financial cost.

While working with the rehabilitation counselor to get equipment and maintain his employment, Mr. Helios was offered additional rehabilitation services. At that time, Mr. Helios' work situation was so demanding and complex, and he was so focused on his employment, he could not consider other issues and did not utilize these services.

The rehabilitation counselor was supportive, answered questions, and assisted in decision-making. The counselor assured Mr. Helios that work issues could and would be resolved through

the use of technology. He made Mr. Helios aware of some of the issues to be faced in the future and what assistance could be provided.

Mr. Helios was amazed that the rehabilitation counselor could respond to his problem and assist him in identifying and obtaining needed equipment. Even when the process was slow, and the equipment did not work as it should have, Mr. Helios was grateful to have help. It took approximately 1 year to get Mr. Helios all the equipment he needed.

Employer Issues

When his vision began to deteriorate, Mr. Helios was employed with an architect he had known for many years. When Mr. Helios began to have problems completing job tasks due to his vision loss, the employer was helpful and patient. It was difficult for Mr. Helios to render drawings because his visual acuity had deteriorated. He spent more time running projects and dealing with administrative issues. The personal relationship between the two men made the situation much more comfortable for Mr. Helios.

Eventually, the rehabilitation counselor met with the employer. As plans were made for Mr. Helios to obtain a computer through rehabilitation services, the employer was computerizing the work site, and he provided time for Mr. Helios to become familiar with computers at the job site. As he became comfortable with the equipment, Mr. Helios was able to do most of the things he had done in the past. The cooperation of the supervisor and the coworkers was a key factor in Mr. Helios' ability to function on the job.

The employer was cooperative throughout the entire sequence of events, from Mr. Helios' vision loss, work with the rehabilitation counselor, and his efforts to obtain and learn to use equipment. As a profession, architects are professional, personal, and willing to help individuals deal with problems. The rehabilitation counselor assured the employer on an ongoing basis that everything possible would be done to assist Mr. Helios. However, the employer was very frustrated because the process, from his point of view, was very slow. He was paying Mr. Helios

The cooperation of the supervisor and the coworkers was a key factor in Mr. Helios' ability to function on the job.

throughout this period and reduced productivity was costing the company money.

As Mr. Helios proceeded through this adjustment process, the company restructured, dissolved the partnership, and his supervisor started another company focusing on interior design,

rather than architecture. Mr. Helios went to work for the other partner. The new supervisor was not as willing to work with Mr. Helios and ultimately Mr. Helios left the job. Although the separation was painful, it provided Mr. Helios an opportunity to have a transition period functioning without his vision before becoming self-employed.

Family Issues

The family has been supportive of Mr. Helios' efforts to remain employed. His brother-in-law has provided technical assistance in technology issues, such as customizing the computer programs and adapting all of the software packages. His spouse assists him in completing tasks in his office.

Mr. Helios frequently reminds his family members that he cannot see things they expect him to see. This is sometimes frustrating for him. He feels he is not totally adjusted to his limited vision. He finds it difficult to ask for help and is not sure where to find it.

Personal Issues

The loss of vision was, and continues to be, very frightening. Mr. Helios' initial reaction to his loss of vision was to become focused on resolving employment-related issues. The total impact of his vision loss was not felt until the employment issues were somewhat resolved. Then the emotional consequences were realized.

Mr. Helios became angry when his visual condition prevented him from utilizing his architectural skills, abilities, and training. He eventually became resolved that he would accept the things he could not do, but he would continue to do what he could, and that he would continue to work as an architect. Mr. Helios is scared of what he might do if he were unable to continue his work as an architect. He is frightened at the prospect of starting all over again and has no desire to do anything else.

Although he has a white cane, Mr. Helios does not use it because it would be a signal to others that he needs help. Using the cane would make it easier for him to navigate around the urban area by assisting him in identifying buildings, elevators, etc. He continues to work on accepting his visual loss.

Mr. Helios has not had contact with other persons with a visual loss. He has never been offered an opportunity to participate in a support group or counseling to assist him in dealing with the emotional and social ramifications of vision loss.

Recommendations

Mr. Helios advised employers that when they have people working for them, it makes a big difference if they stick behind them. An employer has to have a certain amount of commitment to employees. And the government has systems in place so employers can retain workers without it costing the employer a lot of money.

If you are a worker and you need help staying on the job, he recommended developing a personal relationship with the rehabilitation counselor. Despite the problems with the system, there are good programs to help people.

Rehabilitation Counselor Perspective

Mr. Helios was the first client the rehabilitation counselor, Mr. March, worked with who was an architect and required such specialized assistive technology. The most important service Mr. March provided to assist with job retention was the technical expertise and financial assistance to select and purchase appropriate assistive technology. Due to the specialized nature of the equipment obtained, the situation presented a big challenge to Mr. March.

The agency was able to respond to Mr. Helios' needs in a timely manner and to provide support to the employer, the coworkers, and the client. The case was given a high priority because it involved job retention. Mr. March estimates that from the time he initially met with Mr. Helios, to the time the adaptive equipment was operational on the job site, was only about 60 days. The agency was sensitive to the employer's concern about productivity, and Mr. March worked very diligently to coordinate vendors and resources.

Although Mr. Helios' rehabilitation file was closed after the equipment was procured, Mr. March continued to maintain contact with him, primarily through telephone calls initiated by Mr. Helios. Mr. March assisted Mr. Helios in contacting the appropriate agencies to register as a minority business and become eligible for set-aside contracts.

Job Site Modification/Job Restructuring

The employer relied on Mr. March and Mr. Helios to select and obtain appropriate equipment. A job analysis was completed, and at least three visits were made to the job site before the equipment was ordered.

The rehabilitation agency and Mr. Helios purchased the equipment together. The employer was unable to assist in purchasing equipment due to budgetary constraints. The equipment initially obtained did not meet Mr. Helios' needs and it was necessary to involve additional vendors and obtain additional equipment.

Because Mr. Helios' vision stabilized, he was able to perform all of his job duties with adaptive equipment (i.e., a CCTV, computer with large print enhancement, and a low vision lens).

Training/Retraining

The rehabilitation engineer and the vendors assisted Mr. Helios in becoming familiar with the equipment and software packages, but Mr. Helios did much of his learning independently.

He took a few computer classes at a community college to learn basic skills; he paid for these courses himself.

Employer Issues

The employer expressed a great deal of apprehension regarding what the available technology could do, who would pay for it, how it would affect the interaction among the coworkers, and whether the finished product would be of sufficient quality. The employer was also concerned about the financial repercussions of down time on the job. Mr. March spent considerable time with the employer explaining the process of rehabilitation and what could be expected from the agency. He used rehabilitation engineers and vendors to assist in educating the employer about the available technology.

Because of their friendship and Mr. Helios' exceptional job skills, the employer was very cooperative and eager to assist Mr. Helios. He maintained continuous contact with Mr. March throughout the rehabilitation process. Mr. March met with several of the coworkers and all were supportive of Mr. Helios' efforts to retain his job. They were intelligent people who were interested in the equipment and curious about how Mr. Helios could continue to perform his duties.

Personal Issues

Mr. Helios is highly motivated and a good employee, as well as a modest and interesting man with a great deal of life experience. He was an integral part of the business and his contribution was valued by the company. He was determined and persistent in his efforts to find answers and to explore alternate avenues. Mr. Helios wanted assistance; he did everything that could be expected of him and more. He participated in everything and this motivation made Mr. March eager to assist him.

Several members of the rehabilitation agency staff with similar visual conditions spoke with Mr. Helios and attempted to provide support.

Recommendations

Mr. March advised other rehabilitation counselors to be persistent, but have empathy for the employer's apprehension; educate the employer. Make it clear that the rehabilitation system is there to help the employer as well as the employee. Try to put everything in simple terms. Be supportive and keep everyone's fears to a minimum. Take advantage of whatever resources your system provides.

Use imagination and creativity to make the process work for you instead of against you. Get paperwork processed as promptly as you can. Have good rapport with the vendors so they serve you quickly.

Employer Perspective

The employer, Mr. Kiel, had a longstanding relationship with Mr. Helios. He expressed deep professional and personal respect for Mr. Helios' abilities and knowledge. Because of this relationship, Mr. Kiel was highly motivated to assist Mr. Helios in retaining employment. In addition to working with Mr. Helios and the rehabilitation counselor, Mr. Kiel made personal contacts with professionals in the field to obtain further information about Mr. Helios' condition and what was available to assist him in performing his job.

Job Site Modification

Prior to obtaining assistive equipment, Mr. Helios was creative about finding ways to accomplish job tasks with his limited vision. He would send two workers to visit job sites and make reports to him. He read with difficulty, and took notes at meetings. With the help of another person, he accomplished most tasks. Mr. Helios did not let his work suffer because of his vision loss.

Mr. Kiel cooperated with the rehabilitation agency in its efforts to obtain assistive technology to enable Mr. Helios to complete his job duties. Considerable paperwork was required and Mr. Kiel felt it took a very long time to obtain the equipment, even considering its specialized nature. The equipment provided did not meet the needs of the worker or the employer, and appropriate training was not provided. Mr. Kiel reported, "It was very discouraging. The more we pushed, the less stuff happened. We had to go through paperwork and this and that. Then finally one day some, stuff arrived and the technicians came in to set the thing up and we sat down and worked with it and they said, 'This is the equipment, but we don't know how to use it.' It was very difficult."

Job Restructuring

When a restructuring of the architectural firm resulted in Mr. Kiel specializing in interior design rather than architecture, he arranged for his former partner to maintain Mr. Helios' employment. The partner considered Mr. Helios an expensive employee and subsequently drastically reduced his salary. Eventually, Mr. Helios' salary was decreased to such an extent that he elected to resign his position and become self-employed. Although Mr. Helios had negative feelings toward the partner, he maintained a positive relationship with Mr. Kiel.

Mr. Kiel and Mr. Helios made an agreement allowing Mr. Helios to route business through Mr. Kiel's office. Mr. Kiel is hopeful that in the future, Mr. Helios will develop his business sufficiently so that the two of them can work together on other projects. Mr. Helios, with the help of his spouse, became more

proficient utilizing assistive technology. He appeared to have increased self-esteem, a more positive attitude about his situation, and was pursuing work as a consultant and minority business owner. He is completing complex technical reports for local government agencies.

Training/Retraining

Although the rehabilitation agency made some token effort toward training Mr. Helios, it amounted more to, "here it is and look what it can do," then a "pat on the back".

Mr. Helios received some computer training, along with other workers at the job site, when the business moved to a more technology-based system.

Rehabilitation Services

Mr. Helios introduced Mr. Kiel to rehabilitation services, and Mr. Kiel was agreeable to working with the counselor. Mr. Kiel met with the rehabilitation counselor and guaranteed employment for Mr. Helios, provided appropriate equipment could be obtained. Mr. Kiel completed the paperwork the rehabilitation counselor required and contacted him on an ongoing basis regarding Mr. Helios' status.

After what seemed like a very long delay to Mr. Kiel, technicians arrived with the assistive equipment and assembled it. The entire staff was enthused and supportive of this process. However, once assembled, the equipment did not meet Mr. Helios' needs. Although Mr. Helios was pleased to get equipment that provided some assistance, it was not enough to enable him to perform his job. The rehabilitation process was very frustrating for Mr. Kiel, who felt it was slow and bureaucratic.

Although the rehabilitation counselor was diligent in his attempts to acquire assistive equipment for Mr. Helios, Mr. Kiel felt Mr. Helios should have received assistance coping with the emotional impact of his loss of vision. Mr. Kiel believed the stress of vision loss profoundly affected Mr. Helios and he would have benefited from additional support during that time.

Coworker Issues

The coworkers enjoyed working with Mr. Helios. Everyone respected his technical knowledge and looked up to his abilities.

Mr. Kiel realized Mr. Helios was having a difficult time utilizing his equipment and functioning independently as an architect. He sensed Mr. Helios was becoming discouraged and depressed, which further impaired his ability to complete work. Mr. Kiel did everything he could to encourage Mr. Helios to acquire business and keep working. Mr. Helios responded positively to this encouragement and has acquired additional business.

Personal Issues

Mr. Kiel was initially unaware of the extent of Mr. Helios'

visual loss and the profound stress Mr. Helios was experiencing. When Mr. Helios explained the situation to him, Mr. Kiel realized the vision loss was becoming a mental block for Mr. Helios and he became determined to help him overcome it.

Mr. Kiel observed Mr. Helios adjusting to his vision loss. He saw the affect it had on Mr. Helios' career. He felt Mr. Helios went through a period of depression that negatively affected his ability to work. As Mr. Helios became more comfortable with his vision loss, he appeared more confident. In Mr. Kiel's opinion, Mr. Helios still regards his visual disability as a stigma. Mr. Kiel continues to encourage Mr. Helios at every opportunity.

Recommendations

The employer felt that the equipment needed to be provided in a more timely manner, and training on the equipment needed to be provided. He also believed counseling should have been provided. Mr. Kiel stated, "I just think counseling is the most important thing...He could have, with proper counseling, a bigger bang for the buck...I could have bought a program...so that he could operate the equipment I have here. So the employer, with a very minimum amount of money, could have made him operational. But the problem was, he had this incredible feeling that he couldn't do it."

Significant Other Perspective

Mr. Helios' significant other is his spouse, Ms. Helios.

Self-Employment

When Mr. Helios stopped working for the employer, things were rather scary for the family. He decided to become self-employed. During the initial period of self-employment, business was slow and finances were managed carefully.

Ms. Helios provides clerical assistance to her spouse in his business. Now that he is self-employed, Mr. Helios has others completing tasks that are difficult for him, such as drawing, and he concentrates more on management issues.

Mr. Helios is now doing what he always wanted to do (i.e., run his own company). If he had not lost his vision, he might never have done this. It is harder when you have your own business, but he enjoys it.

Rehabilitation Services

The equipment provided by the rehabilitation counselor was the most helpful thing in getting Mr. Helios back to work. It was a slow process with a lot of red tape. It took perhaps 6 to 8 months to get the equipment. If he had not known the employer as well as he did, the time required to get the equipment could have

been a real problem. But the employer was a good friend, and there were other tasks Mr. Helios could complete while waiting for the equipment to arrive.

The rehabilitation counselor did not do much counseling. Mostly he was a "direction-finder". He offered to get Mr. Helios information about a special bus that would take him back and forth to work but Mr. Helios would never use it while he can still use public transportation. Transportation issues influence what jobs he will accept.

The equipment provided by the rehabilitation counselor was the most helpful thing in getting Mr. Helios back to work.

His ophthalmologist referred him to a low vision clinic where he was prescribed special aides, like magnifying glasses. He is able to use them to see buildings. When the couple goes out, Mr. Helios uses them to see at a distance. Ms. Helios encourages him to use his remaining vision to its fullest extent.

Personal Issues

According to Ms. Helios, Mr. Helios has been an architect for 30 years. Although many people think of architecture as a visual skill, a great deal of it is mental. Mr. Helios can visualize what he is designing, then he use his computer and other devices to see what he is working on. He can rely on his years of experience to assist him in visualizing what things will look like.

Mr. Helios has always been driven to achieve. Architecture has always been important to him. He always wanted to be self-employed, but went to work for someone else when his children were young and the family needed the security of a regular income. In some ways, the break with the employer gave him the opportunity to return to self-employment, which he prefers. He has been very excited and challenged by it. He is not the kind of person who would stop working and he never considered it as an alternative.

The vision loss was gradual, but during a period of a few years, it deteriorated more quickly. Tasks became much more difficult to complete. Mr. Helios found that tasks he could perform quickly at one time, such as technical drawings, took a great deal more time. This was quite frustrating because he takes great pride in his work.

His father had a great influence on Mr. Helios. His father instilled that inner drive. Even if finances had not been an issue, that inner drive would have motivated him to continue working.

Losing vision was a frustrating experience for Mr. Helios and he has had a difficult time accepting it. Initially, he suffered

silently, not admitting that he could not see things. He is more open about stating that he cannot see things now.

The loss of vision was difficult for the children, too. Their father can't do things he used to do and that other fathers do, such as play golf. It is frustrating for Mr. Helios. But he is still very close to his sons, who value his opinion and have long talks with him.

Ms. Helios provides emotional support to her spouse. She functions as a sounding board for him for personal and professional issues. Being there was the best thing Ms. Helios could do for her spouse, who is a very independent person.

Recommendations

Ms. Helios recommended that others be there for their loved ones. It is difficult to just stand there and not offer advice, but that is what you need to do. Always let the person know that if they fall, you will be there to pick them back up and the two of you will keep going together.

Survey Results

An examination of the survey results reveals that there are substantial discrepancies of opinion among the 4 respondents in some areas. For example, the importance of changes in the physical surroundings at the job site on the subject's ability to retain employment was rated as "not important" by the significant other, "somewhat important" by the rehabilitation counselor, and "critically important" by both the subject and the employer. The importance of the employer in the subject's ability to retain employment was rated as "not important" by the significant other, "very important" by the employer, and "critically important" by the rehabilitation counselor, whereas the subject indicated that the employer actually "hindered ability" to retain employment. In regard to a change in the job duties or job description, the employer and the rehabilitation counselor both indicated it was "not important", whereas the significant other rated it as "very important" and the subject rated it as "critically important".

The rehabilitation counselor rated the importance of transportation on the subject's ability to retain employment as "not important", whereas the subject and the significant other stated that it was "very important" and the employer rated it as "critically important". The rehabilitation counselor also rated the areas of personal characteristics of the worker and the role of the significant other differently from other group respondents. The rehabilitation counselor assigned a rating of 5, or "critically important" to the personal characteristics of the worker, whereas the 3 remaining respondents assigned a rating of 2, or "not important". The rehabilitation counselor stated that the role of the significant other was "not important", whereas the employer rated it as "somewhat important" and the subject and

significant other stated it was "very important". Another area of some disagreement was the importance of the rehabilitation counselor. The subject and the rehabilitation counselor both assigned a rating of 5, or "critically important"; the employer rated the role as "very important"; and the significant other assigned a rating of 3, or "somewhat important".

There was perfect agreement regarding the impact of coworker attitudes and cooperation with organized labor, with all respondents agreeing these items were "not important". The importance of retraining was regarded as "very important" by the subject and the significant other and "somewhat important" by the rehabilitation counselor; this item was not rated by the employer. The importance of the rehabilitation process was rated as "somewhat important" by the subject and the significant other and "very important" by the employer and the rehabilitation counselor.

Table 10. Survey Results: Helios

Dependent Variables	Independent Variables			
	Employee	Significant Other	Employer	Rehabilitation Counselor
Rehabilitation counselor	5	3	4	5
Rehabilitation process	3	3	4	4
Significant other	4	4	3	2
Employer	1	2	4	5
Change in job duties or job description	5	4	2	2
Change in physical surroundings at job	5	2	5	3
Cooperation with organized labor	2	2	2	2
Retraining	4	4	0	3
Transportation	4	4	5	2
Financial issues	5	4	5	5
Coworker attitudes	2	2	2	2
Personal characteristics of worker	2	2	2	5

0 = no answer

1 = hindered my ability

2 = not important

3 = somewhat important

4 = very important

5 = critically important

Results

The main goal of the study was to identify the impact of job modifications, job restructuring, training/retraining, and organized labor on the ability of the subjects to retain employment after a loss of vision. However, several other pertinent themes were identified. The analysis of qualitative data addresses the primary research questions first, followed by basic demographic data concerning the subjects. Finally, other themes identified through qualitative analysis of the case studies are presented. This section concludes with an analysis of survey data collected from each of the 40 persons interviewed in the development of the case studies.

Job Modifications

Every subject included in the study utilized some type of job modification strategy. The job modification used by 9 of the 10 subjects was a computer with assistive technology (i.e., large print software and a large screen monitor(3) or voice synthesis and an optical character recognition system(6)). Nine subjects utilized adaptive software; 6 subjects used a CCTV. Only 3 of the subjects reported using Braille to complete job tasks. Six subjects used other aids and appliances, such as magnifiers or monoculars.

Other job modifications were primarily to the work environment. Four subjects reported modifications to the job site to accommodate equipment; 2 had larger work areas, 1 had a larger desk, and another had modular furniture to maximize existing space. Two subjects had accommodations to reduce glare. Physical changes were made at the work site for 2 employees; one employer painted outside stairs with a high-contrast non-stick paint and the other removed large potted plants from the lobby to facilitate mobility.

Other job modification strategies included 2 subjects who used headsets, 1 a cassette recorder and velcro attachments, and 1 who used a note-taking device.

Job Restructuring

Job restructuring strategies were more individualized than job modification strategies. The most consistently used restructuring strategy, reported by 6 of 10 subjects, was use of another staff person to read printed or hand written documents. Three subjects received assistance from a part-time person hired specifically to provide either consultation, reader services, or clerical assistance. Three subjects received on-the-job assistance through job-shadowing, a job coach, or some other type of on-the-job trainer. Two subjects received assistance from family members in organizing or completing clerical duties.

Two subjects retained their employment with the same company but moved to different positions after losing additional vision. One subject stayed in the same profession but became self-employed after his vision loss. Two subjects had their workloads reduced after their vision loss. Two subjects reported that they were not required to complete some job duties due to their vision loss. Three employers reported that these workers were slower performing job tasks than sighted workers. Two employers have regularly scheduled meetings with staff with visual impairments to facilitate communication.

Two employers allowed the employee to take paid time off from work away from the job site to pursue necessary training connected with vision loss, 1 for Braille, the other for dog guide training. Two employers adjusted scheduling to allow 1 worker a more flexible schedule to accommodate transportation problems and the other to return to work part-time on a temporary basis. One employer gave the employee a longer period to learn new job tasks. Other job site restructuring strategies included: higher security access on computers, lowered qualifications for hiring, introduction to security staff, providing cab fare rather than mileage allowance, and allowing the worker to fly, rather than car pool, to statewide meetings.

Training/Retraining

Six of the 10 subjects received training on and off the job regarding use of computers and other access technology, as well as on-the-job orientation and mobility training. Six of the employers provided some type of on-the-job training or staff development for the subjects.

Four of the subjects received Braille instruction while employed. Only 1 subject received training in daily living skills while employed, although 7 of the 10 subjects received personal adjustment training at some time. One subject reported on-the-job training in use of a CCTV. One subject learned to type through use of a typing tutor and 1 subject is currently enrolled in college classes.

Organized Labor

None of the subjects, the rehabilitation counselors, employers, or significant others believed that organized labor had any impact on the subjects' ability to retain employment.

Characteristics of the Subjects

Three of the 10 subjects included in the study are females. All of the subjects live in urban areas, with 9 residing in a

large city and 1 in a small urban area. Of the 10 subjects, 3 are high school graduates with 1 of these currently enrolled in college courses, 4 are college graduates with 1 a CPA and another an architect. One subject has a master's degree in social work and another has a master's degree in vocational rehabilitation. One subject has a Ph.D. in psychology.

Eight of the 10 subjects are married and live with a spouse. The remaining 2 subjects have never been married and live alone. Only 2 of the subjects have secondary disabilities; one has a brain injury and a hearing impairment subsequent to surgery for a brain tumor and the other has diabetes.

Three of the subjects are employed by state agencies and 1 by a federal agency. The remaining 6 subjects are employed by private-for-profit companies.

The subjects are employed in the following occupations with the employer listed: (a) mail clerk at a national distribution center; (b) supervisor at a state agency; (c) customer service representative at a national bank card center; (d) pastor at a small church and sales representative at a computer sales store; (e) vocational rehabilitation counselor at a state agency; (f) self-employed architect; (g) computer coder for a national communications company; (h) psychologist for a federal health care provider; (i) clerical assistant at a national insurance company; and (j) employment analyst for a state agency.

Descriptions of Subjects

Throughout the interview process, some subjects described themselves and the characteristics they believe influenced their ability to retain employment. Four subjects discussed their ability to adjust to their vision loss. Of these 4, 1 stated that adjustment was positive; the remaining 3 reported difficulty adjusting to their vision loss, stating that they were angry, frightened, or hid their vision loss from others. Three subjects mentioned the support of their family and/or friends as something that influenced them in their efforts to retain employment. Two subjects described themselves as friendly and 2 described themselves as motivated to retain employment. Subjects also used the following other descriptors regarding their own personalities: outgoing, persistent, laid back, and having a positive attitude. One subject also complained of feeling that work could not be completed quickly enough.

When rehabilitation counselors described the subjects, 4 stated that they were intelligent, 3 commented upon their work ethics, and 3 described the subject they worked with as being single-minded, having tenacity, or having persistence. Two rehabilitation counselors described subjects as being financially motivated, 2 as motivated, 2 as having family support, and 2 as being a strong person or having a strong character. Some of the other adjectives that rehabilitation counselors used to describe

the subjects included: independent, young, easy going, nice, modest, patient, capable, interesting, or dedicated.

Employers describing the characteristics of the subjects used such words as professional (2), motivated (2), having a supportive family (2), having good work habits or being hard working (3), or being willing to learn or try new things (2). Other positive descriptors of subjects included: conscientious, autonomous, determined, young, reliable, patient, open, caring, and having a desire to be productive. One employer did describe a subject as being slow, another commented that the subject needed counseling, and another that the subject had taken the job because employment was needed.

Four of the significant others commented about the subjects' work ethics, desire to work, being a hard worker, or working longer hours. Three remarked on the persistence or determination of the subject. Two significant others expressed concern about the stress level experienced by the subject in their effort to retain employment. Other comments about the subjects concerned the desire to be independent (2), intelligence (2), being driven to achieve or not fail (2), and being meticulous or a perfectionist (2). The following terms were also mentioned when describing the subjects: good problem solver, optimistic, organized, confident, self-assured, and having a good memory.

Motivation

Family background or upbringing was cited by 6 of the subjects as a significant influence on their motivation to work. Five subjects specifically mentioned "work ethic" when explaining their desire to retain employment. Six of the subjects expressed a "need" or "drive" to work, to "stay busy", or to have "a purpose".

In 6 of the 10 cases, finances influenced the decision of the subject to continue employment. Four subjects mentioned the strong desire to be independent. Three subjects attributed their ability to retain their employment to their faith.

Other sources of motivation mentioned by subjects included: inspiration from others (3), interest in technology (2), support from friends (1), to be an example to children (1), employer efforts (1), and to the desire to have more challenging work (1).

Employer and Coworkers

Of the 10 subjects, 7 reported experiencing some negative response from coworkers. These negative responses took the form of criticism of the worker and the worker feeling scrutinized, clerical staff being reluctant to provide assistance, negative comments and jokes from coworkers, or negative remarks about assistive equipment. One worker sensed that coworkers were embarrassed or uncomfortable being around someone who is blind.

Only 1 of the subjects said that coworkers went out of their way to be helpful.

In contrast to these rather negative experiences with coworkers, 8 of the subjects expressed positive comments about their supervisors. Subjects described their supervisors as supportive, cooperative, or positive. Two subjects expressed appreciation to the supervisor for facilitating communication or relationships with coworkers.

One subject attributed the support of the employer to a commitment to affirmative action, while another attributed it to the employer's religious base. Two subjects expressed confidence that they would be considered for promotion; only 1 subject expressed the belief that the employer routinely promoted sighted persons over qualified workers who are blind. One subject expressed frustration with the employer, particularly regarding lack of support mechanisms. Another subject reported that the employer was apprehensive about maintaining the worker after his vision loss.

Six of the rehabilitation counselors made no reference to coworkers. Of the 4 who did, 2 stated that coworkers were apprehensive or that there was friction with coworkers. The remaining 2 expressed positive comments about the coworkers and their relations with the subjects. When talking with employers, 5 made positive comments about interactions with coworkers and the subjects, 3 discussed educational opportunities made available as a result of the subject, 3 had no comments, and only 1 mentioned problems with coworkers. Of the significant others, 3 expressed negative comments about either insensitivity or poor treatment from coworkers toward the subject, 3 expressed positive remarks about coworker behavior, and 4 made no comment about coworkers.

Recommendations to Persons with Vision Loss

Subjects of the case studies gave several helpful suggestions to others. Of the 10 persons who successfully retained their employment, 2 mentioned mobility concerns with 1 advising others to get a dog guide and the other encouraging the use of a white cane. Willingness to learn new things, particularly adaptive techniques, was recommended by 2 of the subjects. Two subjects cautioned others not to give up, with 1 also encouraging hard work. Other recommendations from these employed persons to others trying to retain their jobs after a vision loss included: find solutions yourself, accept your loss, face the prejudice you encounter, develop a personal relationship with your rehabilitation counselor, be open with others about your visual disability, and maintain good relations with coworkers. Others with visual disabilities were cautioned to remember that help is available, that others have succeeded at maintaining employment, and that the **actual loss** of vision is not as bad as the **fear** of losing it.

- Learn mobility skills and be as independent traveling as possible.
- Learn new things, especially adaptive techniques, and be as independent as possible.
- Do NOT give up!
- Problem-solve at work. Don't depend on others to find solutions to your problems.
- Maintain communication with your employer.
- Work in a job you are interested in and have the skills to do.

Employers giving advice to persons with visual disabilities echo some of these comments. Three employers advised the worker to initiate plans for problem-solving when problems arise concerning vision loss. Two employers recommended maintaining communication with the employer and 2 employers urged persons with disabilities to be as independent as possible. Two employers advised workers to apply only for jobs in which they were interested or qualified. Other employer recommendations to persons attempting to retain their employment included: keep a sense of humor, be open with the employer, work for someone who is willing to work with you, be independent in your mobility, and sell yourself to the employer.

Recommendations to Employers

Two of the subjects urged employers to support employees who lose their vision; another subject reminded employers to give people with disabilities a chance to do the job. One subject encouraged employers to have an open mind about hiring a person who is blind. Only 1 subject encouraged the employer to utilize vocational rehabilitation services.

Five of the employers made recommendations to other employers regarding employing persons with visual disabilities. These recommendations included: utilize rehabilitation services, educate

yourself about visual disabilities, concentrate on what the person can do, look at the whole person, give people with visual disabilities a chance, use alternative methods to accomplish the same job, and be supportive of your employees.

Recommendations to Rehabilitation Counselors

In regard to rehabilitation counselors, 1 subject advised initiating rehabilitation services at an earlier date and another urged rehabilitation counselors to have patience with their clients. Rehabilitation counselors offered a variety of recommendations to their fellow rehabilitation providers. The most frequently cited recommendation, made by 5 of the 10 counselors, concerned having a thorough knowledge of the client as an

- Have a through knowledge of the client.
- Use consultants.
- Have patience.
- Start rehabilitation as early as possible.
- Visit the job site and work with the employer to identify appropriate equipment, provide information, and offer assistance.
- Be persistent, be organized, and go the extra mile.
- Help the client be and stay in control. Remember the client is in charge.

individual, including use of evaluations and understanding of the client's options and intentions. Two rehabilitation counselors stressed the use of consultants in providing assistance to clients; another suggested development of a resource file, and yet another emphasized the importance of providing information and

support to each client.

In regard to working with employers, 1 rehabilitation counselor recommended visiting the job site, 1 recommended assessing the employer's level of fear and knowledge, and 1 suggested that the employer be offered assistance. Counselors offered the following suggestions to other rehabilitation professionals regarding general activities to promote placement: be persistent; be organized; believe in your client; go the extra mile; proceed slowly; follow-up and follow-through; and work for a good, responsive agency. Providing exposure to technology and obtaining equipment that meets the job demands were also recommended.

When working with persons attempting to retain their employment, rehabilitation counselors urged other rehabilitation personnel to: provide job leads, find jobs with benefits, and remember that timing is crucial. One rehabilitation counselor stated that placement for persons with multiple disabilities is more successful with a smaller business. Rehabilitation counselors were advised to keep their clients active, informed, and to help them maintain existing skills and learn new ones. Always assume that the person will work. Two rehabilitation counselors discussed the importance of helping the client get control and putting the client in charge of job retention. Rehabilitation counselors advised others to listen, encourage their clients, offer counseling, increase family contact, and remember that client motivation is important.

Recommendations to Significant Others

The significant others included in the study provided recommendations to other persons who are close to persons with a visual loss attempting to retain employment. Three of the significant others mentioned the importance of providing support

- Provide support and encouragement.
- Be there when the person needs to talk. Listen.
- Keep communication open.
- Don't push.

and 3 recommended providing encouragement. Two significant others advised that a person must be there and available when a person needs someone and 2 others recommended listening when the person

needs to talk. Other suggestions from the significant others to persons important in the life of someone with a vision impairment included: provide love, keep communication open, do not push the person, remember each person is an individual, do what the person asks when they need help, and let the person go when they are ready. Other significant others advised family members to remember that acceptance is the key and that a loss of vision by a family member can bring out the good character of the entire family.

Transportation

To assist in independent mobility, 5 subjects use a white cane and 2 use dog guides. Three of the subjects are not using any type of mobility assistance, though 1 subject relies on family members to provide sighted guide assistance after dark and another of these 3 depends on the spouse for mobility assistance in unfamiliar areas.

Five of the subjects utilize public transportation to travel to and from their job sites, although one continues to experience difficulty with navigating the system. One subject uses a paratransit system but describes long waits and much inconvenience associated with it. Two subjects rely on spouses with coworkers as back-up systems for transportation to and from work; both subjects reported that transportation remains an ongoing problem. One subject car pools with a coworker and 1 subject walks to work with children providing sighted guide assistance after dark and the spouse providing driver services as needed. Three of the subjects reported that their place of residence was influenced by transportation issues.

Four of the 10 rehabilitation counselors reported some knowledge of transportation issues for their respective clients. Two of the counselors had referred their clients to paratransit systems. One counselor provided financial assistance with transportation for a temporary period, 1 expressed an awareness of the client's long commute to and from work each day, and the third stated that the client walked to and from work without difficulty.

Two employers were aware of transportation issues experienced by their clients. One employer approved a modified schedule to accommodate difficulties caused by the paratransit system. The other employer was not involved in issues concerning daily commuting but did reimburse the employee for cab fare to local meetings and allowed plane travel to meetings at more remote destinations.

Data Analysis

In an effort to determine if the different parties (i.e., workers, rehabilitation counselors, employers, and significant others) had, as distinct groups, distinct opinions regarding the

importance of various factors on job retention, results of the survey were subjected to qualitative analysis. To analyze the data, a one-way multivariate analysis of variance (MANOVA) was performed on 4 independent variables: (a) the worker, (b) their significant other, (c) their employer, and (d) their rehabilitation counselor. Dependent variables included: (a) the rehabilitation counselor, (b) the rehabilitation process, (c) their significant other, (d) their employer, (e) change in job duties or job description, (f) change in physical surroundings at the job, (g) cooperation with organized labor, (h) retraining, (i) transportation, (j) financial issues, (k) coworker attitudes, and (l) personal characteristics of the worker. Participants rated on a Likert scale (1 = hindered my ability, 2 = not important, 3 = somewhat important, 4 = very important, and 5 = critically important) how important the dependent variables were to their ability to retain employment.

Based on Wilks' Lambda criterion, the combined set of dependent variables was not found to be significantly affected by the independent variables, Wilks' Lambda = .265, $F(36,63) = .990$, $p = .503$; thus the 4 groups did not rate the importance of the items on job retention differently depending on the group to which they belonged. Therefore, no univariate follow-up tests were undertaken. Individual cross tabulations were completed on each subject; these results are presented and discussed at the conclusion of each case study.

Discussion

Because this research project is based on qualitative data, the number of subjects is small ($n=10$). The small sample size allowed the researcher to obtain detailed information about each subject's attitudes and behaviors and to examine the roles and relationships in the rehabilitation process. However, caution must be used in generalizing the information in this study to other persons with visual disabilities. Rather, this research is intended to both illustrate some of the issues identified in the two previously conducted quantitative projects (Herndon, 1995; Sikka & Stephens, 1997) concerning job retention and to generate discussion regarding additional areas of research.

Although the subjects in this study were randomly selected from the sample pool, the pool itself was not randomly selected. All names in the sample pool were submitted by rehabilitation counselors participating in earlier parts of the research project. These rehabilitation counselors submitted names only of persons they judged to be successful in job retention. Thus, the sample pool is not representative of the general population of persons who are blind or severely visually disabled and successful in job retention, but only of those suggested by these rehabilitation counselors.

All subjects in this research were at least high school graduates and all had some type of post-high school training, either through their employers, through rehabilitation providers, or through pursuit of higher education. This corresponds with Herndon's finding (1995) that high school and college graduates were more likely to retain employment. Another factor corresponding with Herndon's findings concerns secondary disabilities. Herndon found that persons successful in job retention were less likely to have secondary disabilities than those who were not successful. In the present study, only 2 subjects had secondary disabilities.

Sikka and Stephens (1997) found that the job modification strategy most frequently used by rehabilitation counselors was a physical modification to the job site, with typical modifications including safety or access changes or computer hardware and software. In this research project, all subjects relied on job modification strategies to facilitate their job retention; provision or modification of computer hardware and software was the primary modification utilized.

Sikka and Stephens (1997) also determined that training/retraining and changes in the job description or methods of performing the job were frequently used by rehabilitation counselors to facilitate job retention. This study supported that finding, with 6 of 10 subjects receiving computer access training, 6 receiving some type of on-the-job training, and 4 receiving Braille instruction. Some of the job restructuring strategies employed by subjects in this study included 6 subjects who received assistance from other staff accessing printed documents,

3 who received on-the-job assistance, and 2 who changed jobs but remained with the same employer. Although the specific strategy differed from subject to subject, each subject used some type of job modification strategy.

None of the subjects in this study believed their job retention was influenced by organized labor.

An overriding theme evidenced when reviewing the case studies is the importance of technology in assisting the majority of the subjects in retaining their employment. Of the 9 subjects who used technology, each expressed a profound understanding of its impact on their lives and their vocational potential. Even subjects initially unaware of or uninterested in technology quickly became devotees upon becoming familiar with it.

When complaints about technology were made by any of the 4 parties participating in the intensive interviews, these complaints typically concerned the length of time it took to get the equipment, the difficulty identifying which equipment was best suited to the task, the difficulty obtaining equipment compatible with other workplace technology, or difficulty coping with the stress of trying to produce work while learning how to use new equipment. The process for determining which equipment is appropriate and acquiring it are typically different for each state. These results suggest that further research to identify those states with a timely and efficient process for procuring equipment is indicated, thus providing a model for improvement for states where problems exist. Identifying the appropriate equipment is a complex task that appears to require collaboration of the worker, the employer, the rehabilitation counselor, someone knowledgeable about access technology, such as a rehabilitation engineer, and the vendors. The workers appeared to be caught in the middle of this issue, on the one hand being grateful that equipment was being provided and on the other, feeling the pressure of the employer's impatience regarding timeliness and compatibility issues.

Even with the use of technology, access to printed documents continues to be an issue for employees with visual disabilities. Although subjects in this study typically had assistance from a sighted person to access printed materials when the use of technology alone was not sufficient, these employees, and sometimes their employers, commented repeatedly that they perceived negative feelings from coworkers regarding this issue. Employees sometimes stated they felt that clerical staff perceived this task as an additional burden on their time or that coworkers perceived them as being less competent because they could not complete these tasks without assistance. Of the 10 subjects in this study, 7 reported experiencing some type of negative feedback from coworkers. Although the employees in this study were able to cope with this issue, it did appear to place additional stress on them at the job site.

Another stressor identified in the study was the pressure experienced by some subjects to produce at the same level as their

sighted coworkers. These workers expressed the feeling that they had to work longer and harder to complete routine tasks, thus preventing them from producing at a more efficient level. An example of such an issue is the difficulty accessing printed materials. Workers with visual disabilities either must scan the documents and convert them to an accessible format or must use some other device, typically a CCTV, that forces them to read materials at a certain place. The prior method results in the worker spending additional time preparing documents for reading while the latter method keeps the worker confined to a particular environment to read materials. Again, if workers request assistance from coworkers with such tasks, they risk feeling that they are generating negative feelings among coworkers.

All of the subjects in the study lived in urban areas. The proximity to public transportation and the availability of jobs in an urban labor market appeared to influence the choices these persons made regarding where to live. Further investigation of the factors influencing job retention in more rural areas of the country is indicated.

Although the words used to describe the various subjects were different, the overall impression is that the subjects, as a group, are intelligent, persistent, hard working, and have a strong desire to work and be independent. When describing themselves, these subjects reported that they relied on their significant others, their faith, and the values or work ethics instilled by their families to sustain them when efforts to retain employment were difficult. This indicates that additional research in the area of counseling and values clarification may be indicated to assist in identifying persons without these support mechanisms and identifying methods to assist these persons in developing systems of support and renewal.

A majority (8 of 10) of the subjects expressed positive comments about their employers. These subjects appeared committed to the belief that without the support, understanding, and cooperation of their employers, continued employment would not be possible. Further research to investigate the characteristics of these employers and why they have been so supportive when many employers are not would be helpful.

When discussing recommendations to other persons with visual disabilities striving to retain their employment, subjects repeatedly advised others to be persistent. This persistence could be applied to working hard to get equipment, to learning to use that equipment, to learning mobility skills, to adjusting to the loss of vision, to convincing coworkers to be cooperative, etc. It was as if each subject could identify many points in the job retention process where each felt like giving up but each persisted and ultimately succeeded. Additional research to determine which techniques would be most helpful in promoting persistence in others appears indicated.

Rehabilitation counselors advising other rehabilitation counselors about successful rehabilitation strategies most

frequently recommended that counselors know their clients. They believed that having a genuine and thorough understanding of the capabilities, aptitudes, resources, options, and needs of the clients, and development of good working relationships, were the most important factors in being able to assist clients in planning successful job retention.

However, when the overall results of this research project are reviewed, it appears that the major factor that, if improved, would facilitate successful job retention more than any other, is promotion of meaningful communication among all the persons involved in the rehabilitation process. When the comments of the various persons interviewed are compared, there appear to be glaring discrepancies of opinion regarding the importance of many factors. For example, transportation is a factor that is typically of significant importance to the subjects and their significant others, yet the rehabilitation counselors are typically not involved in any issues concerning transportation.

This suggests that transportation factors may be a critical issue for persons striving to retain employment while the rehabilitation counselor remains unaware of or uninvolved in the problem. Again, increased levels of communication among the various parties involved in the rehabilitation process would be helpful in addressing this concern.

Recommendations

The following recommendations for additional research are suggested from this project:

1. Determine the most efficient method for procuring suitable computer hardware and software through rehabilitation service systems. Investigate the possibility of replicating efficient models in states where the procurement process takes longer or is less effective.
2. Convene a national summit of state agencies and equipment vendors to determine standards for identification of appropriate and compatible equipment for persons who are blind or severely visually impaired.
3. Investigate the efficacy of informational programs with potential coworkers to facilitate coworker interactions, with the goal of reducing negative attitudes toward both the person with the vision loss and the amount of assistance potentially required to assist that person in retaining their job.
4. Investigate the factors influencing job retention among persons living in rural and semi-rural areas.
5. Identify techniques to facilitate development of support systems geared towards providing persons with vision loss support and avenues of renewal, thus enabling these persons to persevere when faced with obstacles to job retention. Such techniques might include intensive individual or family counseling, participation in support or advocacy groups, networking activities within the community, etc.
6. Examine the characteristics of employers and supervisors who are cooperative with job retention efforts and potential methods of educating other employers regarding job retention issues.
7. Examine the impact of transportation issues on job retention and potential methods of resolving these problems.
8. Investigate job retention issues among persons with limited education and/or a history of employment in blue collar occupations.

Strategies for rehabilitation counselors are also suggested from this research. The following recommendations are made to counselors striving to promote job retention among clients:

1. Have a through understanding of your client and aspects of

their life, including their financial requirements, options, goals, abilities, skills, family life, transportation arrangements, etc.

2. Establish a genuine and compassionate relationship with the client.
3. Get any assistance that would be helpful in identifying the appropriate adaptive equipment necessary to modify the job to the client.
4. Obtain equipment in a timely manner.
5. Maintain contact with the employer to be sure the employer has a thorough understanding of the rehabilitation process and the progress of any services being provided.
6. Be involved in transportation arrangements.
7. Offer counseling and other support services, such as referral to consumer groups or contacts with other persons who have sustained a vision loss, to the person with a vision loss.
8. Insure that the client has adequate time to learn and has instruction about any adaptive equipment obtained for job retention purposes.

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Appendix: Participant Surveys

WORKER SURVEY

Please rate the following items in regard to how important they were to your ability to stay employed using the following scale:

- 1 = Hindered my ability to continue working
- 2 = Not important (had no influence)
- 3 = Somewhat important (had some influence, but not much)
- 4 = Very important (had a significant influence)
- 5 = Critically important (could not have retained employment without it)

RATING	ITEM
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- | | |
|---------|-------------------------------|
| 1. ____ | Your rehabilitation counselor |
| 2. ____ | The rehabilitation process |
| 3. ____ | Your significant other |
| 4. ____ | Your employer |

5. ____ A change in your job duties or job description
6. ____ A change in the physical surroundings at your job site
7. ____ Cooperation with organized labor
8. ____ Retraining
9. ____ Transportation
10. ____ Financial issues
11. ____ Coworker attitudes
12. ____ Your own personal characteristics

EMPLOYER SURVEY

Please rate the following items in regard to how important they were to your ability to keep this worker on the job using the following scale:

- 1 = Hindered my ability to keep this worker employed
- 2 = Not important (had no influence)
- 3 = Somewhat important (had some influence, but not much)
- 4 = Very important (had a significant influence)
- 5 = Critically important (could not have retained employee without it)

RATING	ITEM
1. ___	The rehabilitation counselor
2. ___	The rehabilitation process
3. ___	The worker's significant other
4. ___	Your company or management
5. ___	A change in the job duties or job description
6. ___	A change in the physical surroundings at the job site
7. ___	Cooperation with organized labor
8. ___	Retraining
9. ___	Transportation
10. ___	Financial issues
11. ___	Coworker attitudes
12. ___	Personal characteristics of the worker

SIGNIFICANT OTHER SURVEY

Please rate the following items in regard to how much they seemed to influence this worker's efforts to stay employed using the following scale:

- 1 = Hindered my ability to keep this worker employed
- 2 = Not important (had no influence)
- 3 = Somewhat important (had some influence, but not much)
- 4 = Very important (had a significant influence)
- 5 = Critically important (could not have retained employee without it)

RATING	ITEM
1. ___	The rehabilitation counselor
2. ___	The rehabilitation process
3. ___	Your influence
4. ___	The employer
5. ___	A change in the job duties or job description
6. ___	A change in the physical surroundings at the job site
7. ___	Cooperation with organized labor
8. ___	Retraining
9. ___	Transportation
10. ___	Financial issues
11. ___	Coworker attitudes
12. ___	Personal characteristics of the worker

REHABILITATION COUNSELOR SURVEY

Please rate the following items in regard to how much they appeared to influence this client's efforts to retain employment using the following scale:

- 1 = Hindered my ability to keep this worker employed
- 2 = Not important (had no influence)
- 3 = Somewhat important (had some influence, but not much)
- 4 = Very important (had a significant influence)
- 5 = Critically important (could not have retained employee without it)

RATING	ITEM
1. ___	Your efforts
2. ___	The rehabilitation process
3. ___	The significant other
4. ___	The employer
5. ___	A change in the job duties or job description
6. ___	A change in the physical surroundings at the job site
7. ___	Cooperation with organized labor
8. ___	Retraining
9. ___	Transportation
10. ___	Financial issues
11. ___	Coworker attitudes
12. ___	Personal characteristics of the worker

